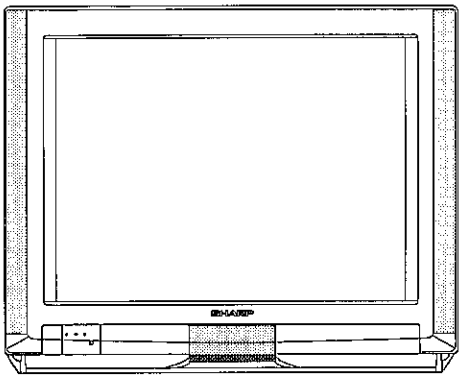
SHARP

SERVICE MANUAL
维修手册

S28M133RX20J/



28 SYSTEM COLOUR TELEVISION
28制式彩色电视机

Chassis No. SP-71

MODEL 型 号 33RX20J

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

为了用户安全起见(根据一些国家的安全规程的需要)，应将电视机保持于最初的状态，而且只能使用与指定物相同的部件。

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WARNING

The chassis in this receiver is partially hot. Use an isolation transformer between the line cord plug and power receptacle, when servicing this chassis. To prevent electric shock, do not remove cover. No user – serviceable parts inside. Refer servicing to qualified service personnel.

警 告

该电视机底盘的有些部分通电。当维修本机底盘时，请在电源线插头和电源插座之间使用隔离变压器。
为了防止电击的危险，不要去拆下机盖。在里面的部件，不是使用者所能维修的，必须委托够格的维修人员来进行维修。

SHARP CORPORATION

ELECTRICAL SPECIFICATIONS

Power Input	AC 110-240V, 50/60Hz (Auto)
Power Consumption	235W
Convergence	Self Convergence System
Focus	Bi-Potential, Uni-Potential Electrostatic
Sweep Deflection	Magnetic
Intermediate Frequency	
Picture IF Carrier	38.9 MHz
Sound IF Carrier	
6.5 MHz	32.4 MHz
6.0 MHz	32.9 MHz
5.5 MHz	33.4 MHz
4.5 MHz	34.4 MHz
Colour Sub-Carrier	
PAL/NTSC	34.47 MHz
SECAM	34.494/34.65 MHz
NTSC	35.32 MHz
Audio Power Output Rating	4W x 1 + 8W x 2 + 13W total 33W (Max)
Speaker	
Size	5 x 9 cm Elliptic x1,10 cm Round x 2-pcs., 10cm Woofer Box
Voice Coil Impedance	16 ohm at 400 Hz, 8 ohm at 400 Hz, 5 ohm at 400Hz (Woofer Box)
Aerial Input Inpedance	75 ohm Unbalanced
Receiving Channels	
PAL-B/G, SECAM-B/G	
VHF	E2 thru E12
UHF	E21 thru E69
CATV	X thru Z + 2, S1 thru S41
PAL-D/K, SECAM-D/K	
VHF	R1 thru R12, C1 thru C12
UHF	21 thru 69, C21 thru C57
PAL-I, SECAM-I	
VHF (IRELAND):	B thru J
UHF (U.K.,H.K.):	21 thru 69
NTSC-M	
VHF (US):	2 thru 13
(JAPAN):	1 thru 12
UHF (US):	14 thru 69
(JAPAN):	13 thru 62
CATV (US):	A-6 thru A-1, A thru W+29
(JAPAN):	C13 thru C63

Receiving Frequency	
VHF Low	44.25 MHz thru 140.25 MHz
VHF High	147.25MHz thru 423.25 MHz
UHF	431.25 MHz thru 863.25 MHz

Specifications are subject to change without notice.

电路规格

电源	交流110～240V、50/60Hz(自动切换)
功率消耗	235W
聚焦	自聚焦系统
焦点	双电位，单电位静电焦点
扫描偏转	磁致偏转
中频	
图象中频载波	38.0MHz
声音中频载波	
6.5MHz	31.5MHz
6.0MHz	32.0MHz
5.5MHz	32.5MHz
4.5MHz	33.5MHz
色彩副载波	
PAL/NTSC制式	33.57MHz
SECAM制式	33.594/33.75MHz
NTSC制式	34.42MHz
音响额定输出功率	8W×2＋4W＋13W,最大33W
扬声器	
尺寸	5×9cm椭圆型×1只,10cm圆形×2只，10cm低音扬声器
音圈阻抗	400Hz时,16Ω,8Ω，5Ω(低音扬声器)
天线输入阻抗	75Ω非平衡式
接收频道	
PAL-B/G、SECAM-B/G制式	
甚高频VHF	E2～E12频道
超高频UHF	E21～E69频道
有线电视CATV	X～Z+2频道, S1～S41频道
PAL-D/K、SECAM-D/K制式	
甚高频VHF	R1～R12频道, C1～C12频道
超高频UHF	21～69频道, C21～C57频道
PAL-I、SECAM-I制式	
甚高频VHF	（爱尔兰）：B～J频道
超高频UHF	（英国，香港）：21～69频道
NTSC-M制式	
甚高频VHF	（美国）：2～13频道, （日本）：1～12频道
超高频UHF	（美国）：14～69频道, （日本）：13～62频道
有线电视CATV	（美国）：A-6～A-1频道, A～W+29频道, （日本）：C13～C63频道
接收频率	
低域甚高频VHF	44.25MHz～140.25MHz
高域甚高频VHF	147.25MHz～423.25MHz
超高频UHF	431.25MHz～863.25MHz

上述规格变更之场合，恕不另行通知

IMPOTANT SERVICE NOTES

Maintenance and repair of this receiver should be done by qualified service peronnel only.

SERVICING OF HIGH VOLTAGE SYSTEM AND PICTURE TUBE

When servicing the high voltage system, remove static charge from it by connecting a 10k ohm Resistor in series with an insulated wire (such as a test probe) between picture tube dag and 2nd anode lead. (AC line cord ahould be disconnected from AC outlet.)

1. Picture tube in this receiver employs integral implosion protection.
2. Replace with tube of the same type number for continued safety.
3. Do not lift picture tube by the neck.
4. Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage completely.

X-RAY

This receiver is designed so that any X-Ray radiation is kept to an absolute minimum. Since certain malfunctions or servicing many produce potentially hazardous radiation with prolonged exposure at close range, the following precautions should be observed:

1. When repairing the circuit, be sure not to increase the high voltage to more than 35.0 kV (at beam 0μA) for the set.
2. To keep the set in a normal operation, be sure to make it function on 30.5 ± 1.5kV (at beam 2.0 mA) in the case of the set. The set has been factory-Adjusted to the above mentioned high voltage.
   ∴If there is a possibility that the high voltage fluctuates as a result of repairs, never forget to check for such high voltage after the work.
3. Do not substitute a picture tube with unauthorized types and/or brands which may cause excess X-Ray radiation.

BEFORE RETURNING THE RECEIVER

Before returning the receiver to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that the leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective device such as non-metallic control knobs, insulating fishpapers, cabinet backs, adjustment and compartment covers or shields, isolation resistor- capacity networks, mechanical insulators etc.

保养维修重要注意事项

本电视机的保养只得由专门技术人员进行。

关于高压系统和显象管的保养维修

对高压系统进行保养维修时，先于显象管管座金属部分与第二阳极引线间用绝缘线（诸如测试探针等）串接一只10KΩ的电阻器，以除去残留于高压系统中的静电。（之前，应从电源插座中拔出本机的电源引线插头。）

1. 本电视机显象管为整体内爆防护设计。
2. 为保证本电视机持久使用的安全，显象管的更换必须使用同型号者。
3. 搬移显象管时，不得倒持其颈部上提。
4. 拆装搬移显象管，必须先用布物等包护荧屏防碎玻璃，并且作完全放电处理后才能进行。

关于X射线

本电视机为无辐射的设计。因此，任何X射线均设计控制于最小绝对极限。然而，在发生故障或保障维修时，过长时间地暴露机芯内部加以放置之场合，便有可能在其近旁产生有害的X射线辐射影响。为此，务请遵循下述预防措施：

1. 维修调整本电视机内部电路时，切勿让其高压超过35.0kV(电子束电流为0μA时)。
2. 为保证本电视机的正常工作，务必保证其高压为 30.5kV ± 1.5kV （电子束电流为2.0mA时）的工作条件。该工作条件值在本电视机出厂前已经调试验收。
   ※本电视机一旦经维修调整，可能导致上述工作高压规定值发生偏动。因此，维修调整完毕，务请重新对其高压值进行确认检查。
3. 更换显象管时，不得使用非经认可的、不同厂家、不同型号的显象管，以免产生超过规定标准的X射线辐射的危险。

维修后归还之前

在把维修后的电视机归还给用户之前，务请进行下列的安全检查。

1. 检查电视机中的所有导线的绝缘包皮有无扭折破损之处，于机芯底板和其它金属部件之间有无他物夹杂。
2. 检查电视机中的所有非金属质的控制旋钮、绝缘鱼鳞纸，机壳后盖、调节器和仪器隔室盖罩或屏蔽，电阻—电容隔离网以及机械部件隔离器等保护绝缘装置、器材。

ADJUSTMENT PRECAUTIONS

This model's settings are adjusted in two different ways: through the I²C bus control and in the conventional analog manner. The adjustment via I²C bus control include present-only variable data.

1) Calling the service mode by the microprocessor

① Make a short-circuit between TP1001 and TP1002, and the microprocessor is put in the service mode (adjustment through the I²C bus control).
② Perss the CH-DOWN key on the remote controller to get ready to select the modes one by one.
③ Perss the CH-UP key on the remote controller to get ready to select the modes in order opposite to the avove step ②.
④ Using the VOL UP/DOWN keys on the remote controller, the data can be converted.
⑤ Remove the short-circuit between TP1001 and TP1002, and the microprocessor is put out of the service mode.

2) Setting the initial (preset) values

① Call up the service mode and turn on the main power switch. A new E²PROM (judged by the first 4 bytes) can be automatically set to the initial data.
② The initial data are as shown on pages 7,8,9 and 10.
③ Note that some items of the data must be modified and the others must stay as initial.

NOTE: After the chassis has been assembled, be sure to call up the service mode first and then turn on the main power switch, as discussed in 2-① above. If the main power switch is turned on without the E²PROM initialized, an excess beam current may flow into the circuitry.

调整时注意事项

本型号电视机由I²C总线控制与一般的模拟调节综合进行。I²C总线控制包括初始设定（预设）以及下述的变量数据项目的调整设定。

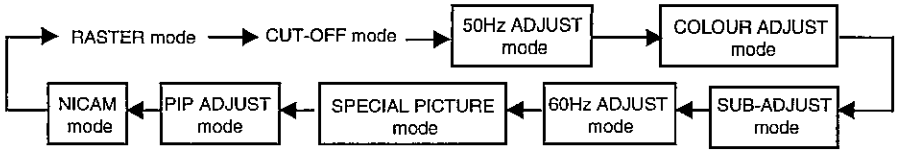
1)微处理机的保养调整状态的设定
①短接TP1001与TP1002之间，微处理机即处于保养调整状态(I²C总线控制调整状态)。
②触按遥控器上的CH-DOWN键以顺序选择各种保养调整状态。
③触按遥控器上的CH-UP键，可按与步骤②相反顺序选择各种保养调整状态。
④触按遥控器上的VOL UP/DOWN键，可修正数据。
⑤消除TP1001与TP1002之间的短接状态，微处理机即脱离保养调整状态。

2)初始值(预设值)的设定
①呼叫保养调整状态位置，打开主电源开关，新的EEPROM(根据最前头的4位字节而判断)即自动地设定初始值。
②初始值设定数据详见第8、9、10、11页之项所列。
③有些项目需要改变设定数据，而有些项目则需要保持初始设定状态。

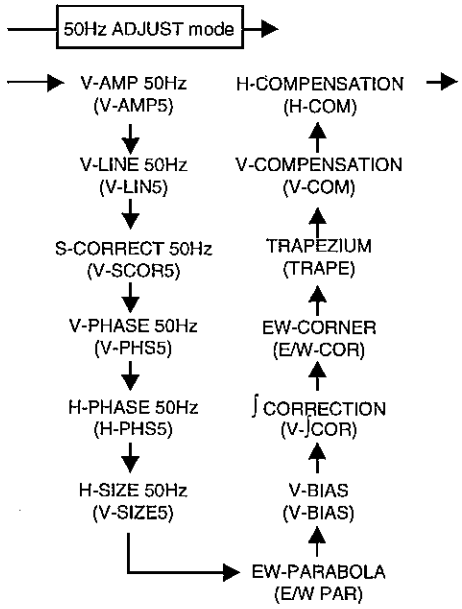
注意：组装电视机底盘后，必须先呼叫保养调整状态位置，然后再打开主电源开关。(见2-①之项所述)。
对EEPROM不加以初始处理而打开电源开关之场合，会引起电子束电源过大发生流动。

■ SERVICE MODE (I²C bus adjustment)

(1) Press the specific keys to change the mode as follows.

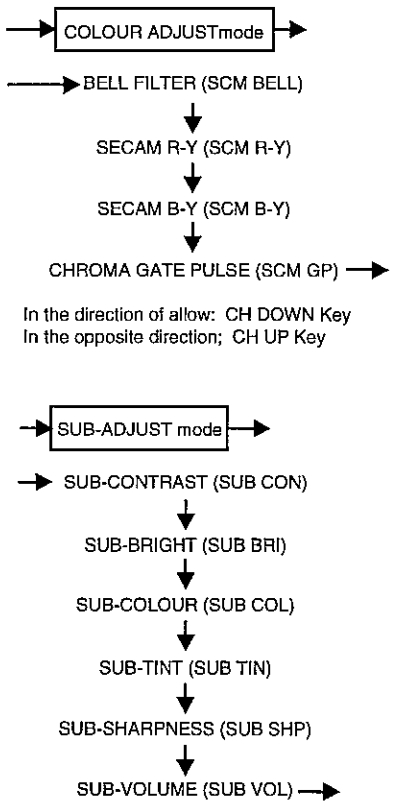


In the direction of allow: CH DOWN Key
In the opposite direction; CH UP Key



In the direction of allow: CH DOWN Key
In the opposite direction; CH UP Key

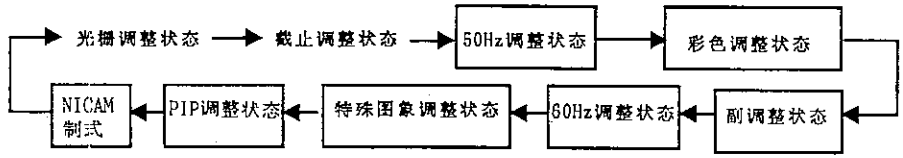
* The characters in parentheses appear on the on-screen display.



In the direction of allow: CH DOWN Key
In the opposite direction; CH UP Key

■保养调整状态（I²C总线控制）

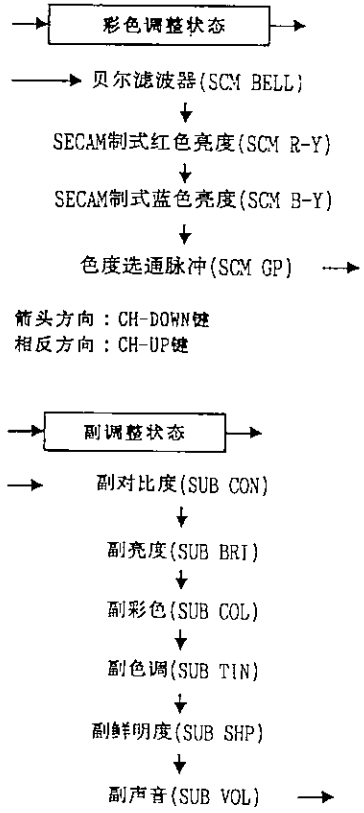
(1)按下记顺序触按规定键而变为各种保养调整状态。



箭头方向：CH-DOWN键
相反方向：CH-UP键

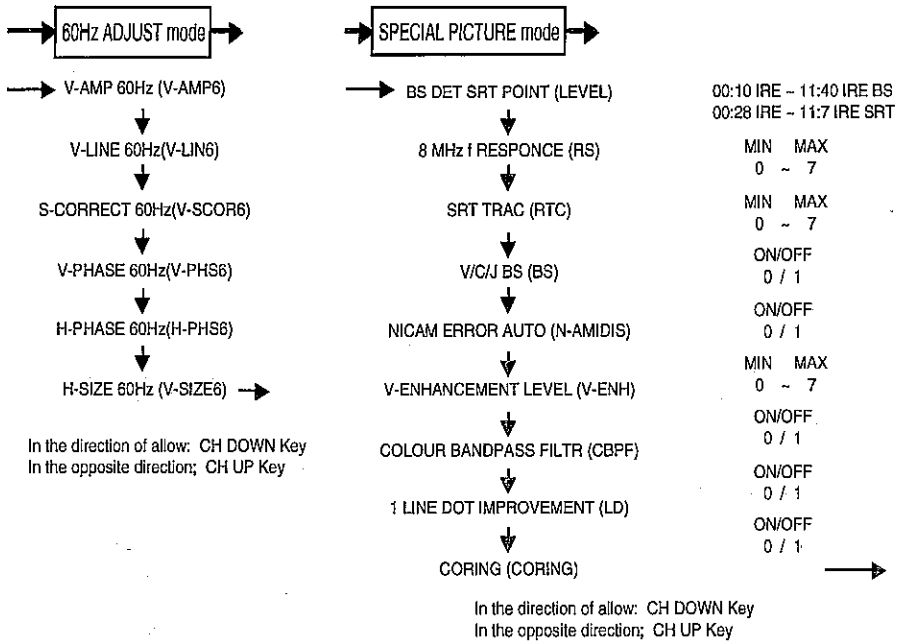
箭头方向：CH-DOWN键
相反方向：CH-UP键

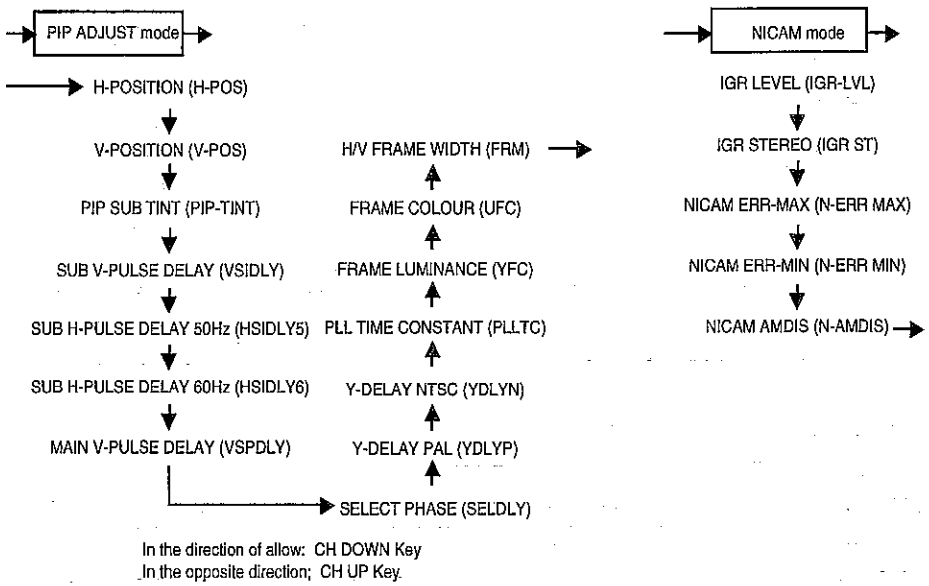
＊括号内的表示为在屏表示内容。

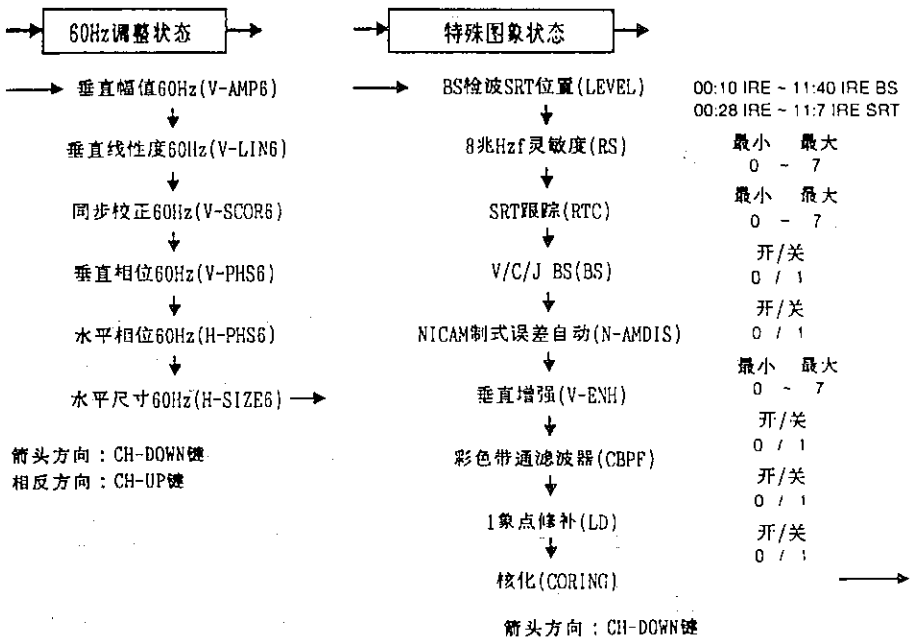


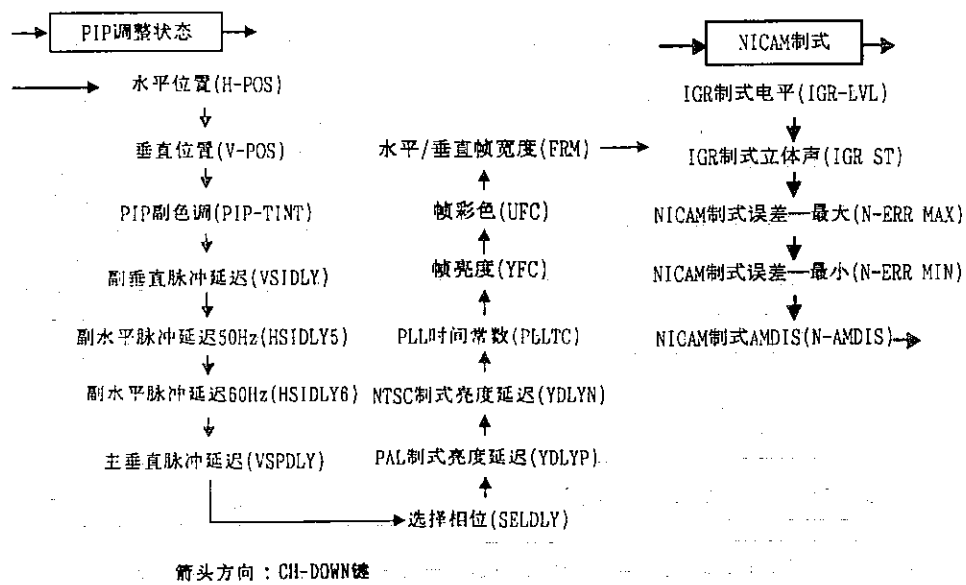
箭头方向：CH-DOWN键
相反方向：CH-UP键

箭头方向：CH-DOWN键
相反方向：CH-UP键


60Hz ADJUST mode
V-AMP 60Hz (V-AMP6)
V-LINE 60Hz(V-LIN6)
S-CORRECT 60Hz(V-SCOR6)
V-PHASE 60Hz(V-PHS6)
H-PHASE 60Hz(H-PHS6)
H-SIZE 60Hz (V-SIZE6)
In the direction of allow: CH DOWN Key
In the opposite direction; CH UP Key
SPECIAL PICTURE mode
BS DET SRT POINT (LEVEL)
8 MHz f RESPONCE (RS)
SRT TRAC (RTC)
V/C/J BS (BS)
NICAM ERROR AUTO (N-AMIDIS)
V-ENHANCEMENT LEVEL (V-ENH)
COLOUR BANDPASS FILTR (CBPF)
1 LINE DOT IMPROVEMENT (LD)
CORING (CORING)
00:10 IRE ~ 11:40 IRE BS
00:28 IRE ~ 11:7 IRE SRT
MIN MAX
0 ~ 7
MIN MAX
0 ~ 7
ON/OFF
0 / 1
ON/OFF
0 / 1
MIN MAX
0 ~ 7
ON/OFF
0 / 1
ON/OFF
0 / 1
ON/OFF
0 / 1
In the direction of allow: CH DOWN Key
In the opposite direction; CH UP Key


PIP ADJUST mode
H-POSITION (H-POS)
V-POSITION (V-POS)
PIP SUB TINT (PIP-TINT)
SUB V-PULSE DELAY (VSIDLY)
SUB H-PULSE DELAY 50Hz (HSIDLY5)
SUB H-PULSE DELAY 60Hz (HSIDLY6)
MAIN V-PULSE DELAY (VSPDLY)
SELECT PHASE (SELDLY)
H/V FRAME WIDTH (FRM)
FRAME COLOUR (UFC)
FRAME LUMINANCE (YFC)
PLL TIME CONSTANT (PLLTC)
Y-DELAY NTSC (YDLYN)
Y-DELAY PAL (YDLYP)
In the direction of allow: CH DOWN Key
In the opposite direction; CH UP Key.
NICAM mode
IGR LEVEL (IGR-LVL)
IGR STEREO (IGR ST)
NICAM ERR-MAX (N-ERR MAX)
NICAM ERR-MIN (N-ERR MIN)
NICAM AMDIS (N-AMDIS)


60Hz调整状态
垂直幅值60Hz(V-AMP6)
垂直线性度60Hz(V-LIN6)
同步校正60Hz(V-SCOR6)
垂直相位60Hz(V-PHS6)
水平相位60Hz(H-PHS6)
水平尺寸60Hz(H-SIZE6)
箭头方向：CH-DOWN键
相反方向：CH-UP键
特殊图象状态
BS检波SRT位置(LEVEL)
8兆Hzf灵敏度(RS)
SRT跟踪(RTC)
V/C/J BS(BS)
NICAM制式误差自动(N-AMDIS)
垂直增强(V-ENH)
彩色带通滤波器(CBPF)
1象点修补(LD)
核化(CORING)
00:10 IRE ~ 11:40 IRE BS
00:28 IRE ~ 11:7 IRE SRT
最小 最大
0 ~ 7
最小 最大
0 ~ 7
开/关
0 / 1
开/关
0 / 1
最小 最大
0 ~ 7
开/关
0 / 1
开/关
0 / 1
开/关
0 / 1
箭头方向：CH-DOWN键
相反方向：CH-UP键


PIP调整状态
水平位置(H-POS)
垂直位置(V-POS)
PIP副色调(PIP-TINT)
副垂直脉冲延迟(VSIDLY)
副水平脉冲延迟50Hz(HSIDLY5)
副水平脉冲延迟60Hz(HSIDLY6)
主垂直脉冲延迟(VSPDLY)
选择相位(SELDLY)
水平/垂直帧宽度(FRM)
帧彩色(UFC)
帧亮度(YFC)
PLL时间常数(PLLTC)
NTSC制式亮度延迟(YDLYN)
PAL制式亮度延迟(YDLYP)
箭头方向：CH-DOWN键
相反方向：CH-UP键
NICAM制式
IGR制式电平(IGR-LVL)
IGR制式立体声(IGR ST)
NICAM制式误差—最大(N-ERR MAX)
NICAM制式误差—最小(N-ERR MIN)
NICAM制式AMDIS(N-AMDIS)

(2) * In going to the service mode, read the data at addresses 00H thru 03H on the EEPROM. If the data is different from the one below, initialize the EEPROM as follows.

00H:50H 01H:80H 02H:30H 03H:13H

[Adjusting items]

No.	Setting item	On-screen display	IC	Data setting	Initial value
0		SERVICE MODE			
1	CUT OFF ADJ.	CUT OFF BKGD		※	※
2	V-AMPLITUDE (50Hz) ADJ.	V-AMP5	PDC	V-AMPLITUDE	73
3	V-LINEARITY (50Hz) ADJ.	V-LIN5	PDC	V-LINEARITY	22
4	V-S CORRECTION (50Hz) ADJ.	V-S COR5	PDC	V-S CORRECTION	9
5	V-PHASE (50Hz) ADJ.	V-PHS5	VCD1	V-PHASE	7
6	H-PHASE (50Hz) ADJ.	H-PHS5	VCD1	H-PHASE	17
7	H-SIZE (50Hz) ADJ.	H-SIZE5	PDC	H-SIZE	42
8	EW-PARABOLA ADJ.	E/W PAR	PDC	EW-PARABOLA	33
9	V-BIAS	V-VIAS	PDC	V-BIAS	5
10	V-∫CORRECTION	V-∫COR	PDC	V-∫CORRECTION	10
11	EW-CORNER ADJ.	E/W COR	PDC	EW-CORNER	5
12	TRAPEZIUM	TRAPE	PDC	TRAPEZIUM	30
13	V-COMPENSATION	V-COM	PDC	V-COMPENSATION	6
14	H-COMPENSATION	H-COM	PDC	H-COMPENSATION	4
15	BELL FILTER ADJ.	SCM BELL	SECAM	BELL FILTER	120
16	SECAM R-Y ADJ.	SCM R-Y	SECAM	R-Y	8
17	SECAM B-Y ADJ.	SCM B-Y	SECAM	B-Y	8
18	SECAM GATE PULSE ADJ.	SCM GP	SECAM	SGP	0
19	SECAM CHROMA ATT	SCM ATT	SECAM	C-ATT	0
20	SECAM ID SETTING	SCM ID	SECAM	ID-SENS	0
21	FLESH COLOUR SETTING	FLESH	VCD1	FLESH	1
22	SRT MODE SETTING	SRT-MD	VCD1	SRT-MD	0
23	WHITE PEEK DETECT LEVEL	WPDL	VCD1	WPDL	1
24	WHITE PEEK DETECT CURRENT	WPDC	VCD1	WP-DET	0
25	HI-BRIGHT COLOUR SETTING	HIBRT	VCD1	HI-BRT	1
26	Y-γ ADJ.	Y-GMMA	VCD1	Y-γ	1
27	COLOUR-γ ADJ.	C-GMMA	VCD1	COLOUR-γ	2
28	COLOUR DETAIL SETTING	CDE	VCD1	CDE	1
29	GP-PHASE ADJ.	GP-PHS	VCD1	GP-PHASE	0
30	R-Y PHASE ADJ.	RY-PHS	VCD1	R-Y PHASE	1
31	R-Y PHASE ADJ. (NTSC)	RY-PHSNT	VCD1	R-Y PHASE	1
32	R-Y GAIN ADJ.	RY-GAIN	VCD1	R-Y GAIN	0
33	G-Y GAIN ADJ.	GY-GAIN	VCD1	G-Y GAIN	2
34	P/N ID SENSITIVITY SETTING	PN-ID	VCD1	P/N-ID	1
35	Y DELAY ADJ.	Y-DLY	VCD1	Y-DLY	0
36	VM-PHASE ADJ.	VM-PHS	VCD1	VM-PHS	0
37	S-TRACKING ADJ.	STRAC	VCD1	S-TRAC	1
38	H-BLK PULSE ADJ.	HBLK	VCD1	H-BLK	0
39	DC-TRANS POINT ADJ.	DCT-P	VCD1	DC-TRANS POINT	2
40	DC-TRANS RATE ADJ.	DCT-R	VCD1	DC-TRANS RATE	6
41	DC-TRANS LIMIT ADJ.	DCT-L	VCD1	DC-TRANS LIMIT	0
42	B.S.P. LIMIT	BSPL	VCD1	B.S.P. LIMIT	0
43	B.S. POINT1	BSP1	VCD1	B.S. POINT1	5

(2)' 进入保养调整状态时,EEPROM上的地址代码00H至03H的数据存储于记忆装置中。如果该数据不符合下记规定要求,即按下表所示要求进行EEPROM的初始值的处理。

00H:50H 01H:80H 02H:30H 03H:13H

[调整项目]

编号	设定项目	在屏表示内容	IC	数据设定	初始值
0		保养调整状态			
1	截止调节	CUTOFF BKGD		※	※
2	垂直幅值(50Hz)调节	V-AMP5	PDC	V-AMPLITUDE	73
3	垂直线性度(50Hz)调节	V-LIN5	PDC	V-LINEARITY	22
4	垂直同步校正	V-SCOR5	PDC	V-S. CORRECTION	9
5	垂直相位(50Hz)调节	V-PHS5	VCD1	V-PHASE	7
6	水平相位(50Hz)调节	H-PHS5	VCD1	H-PHASE	17
7	水平尺寸(50Hz)调节	H-SIZE5	PDC	H-SIZE	42
8	EW抛物面调节	E/W PAR	PDC	EW-PARABOLA	33
9	垂直偏压	V-BIAS	PDC	V-BIAS	5
10	垂直-∫校正	V-∫COR	PDC	V-∫CORRECTION	10
11	EW角部调节	E/W COR	PDC	EW-CORNER	5
12	梯形失真	TRAPE	PDC	TRAPEZIUM	30
13	垂直补偿	V-COM	PDC	V-COMPENSATION	6
14	水平补偿	H-COM	PDC	H-COMPENSATION	4
15	贝尔滤波器调节	SCM BELL	SECAM	BELL FILTER	120
16	SECAM制式红色亮度调节	SCM R-Y	SECAM	R-Y	8
17	SECAM制式蓝色亮度调节	SCM B-Y	SECAM	B-Y	8
18	SECAM制式选通脉冲调节	SCM GP	SECAM	SGP	0
19	SECAM制式色度ATT	SCM ATT	SECAM	C-ATT	0
20	SECAM制式识别设定	SCM ID	SECAM	ID-SENS	0
21	新鲜彩色设定	FLESH	VCD1	FLESH	1
22	SRT状态设定	SRT-MD	VCD1	SRT-MD	0
23	白色峰值检波电平	WPDL	VCD1	WPDL	1
24	白色峰值检波电流	WPDC	VCD1	WP-DET	0
25	高亮度彩色设定	HIBRT	VCD1	HI-BRT	1
26	亮度-γ调节	Y-GMMA	VCD1	Y-γ	1
27	彩色-γ调节	C-GMMA	VCD1	COLOUR-γ	2
28	彩色清晰度设定	CDE	VCD1	CDE	1
29	GP相位调节	GP-PHS	VCD1	GP-PHS	0
30	红色亮度相位调节	RY-PHS	VCD1	R-Y PHASE	1
31	红色亮度相位调节(NTSC制式)	RY-PHSNT	VCD1	R-Y PHASE	1
32	红色亮度增益调节	RY-GAIN	VCD1	R-Y GAIN	0
33	绿色亮度增益调节	GY-GAIN	VCD1	G-Y GAIN	2
34	P/N-识别灵敏度设定	PN-ID	VCD1	P/N—ID	1
35	亮度延迟调节	Y-DLY	VCD1	Y-DLY	0
36	VM相位调节	VM-PHS	VCD1	VM-PHS	0
37	同步跟踪调节	STRAC	VCD1	S-TRAC	1
38	水平熄灭脉冲调节	HBLK	VCD1	H-BLK	0
39	DC变位点调节	DCT-P	VCD1	DC-TRNS POINT	2
40	DC变位率调节	DCT-R	VCD1	DC-TRNS RATE	6
41	DC变位限制调节	DCT-L	VCD1	DC-TRNS LIMIT	0
42	B.S.P限位	BSPL	VCD1	B.S.P. LIMIT	0
43	B.S.位置1	BSP1	VCD1	B.S. POINT1	5
44	B.S.位置2	BSP2	VCD1	B.S.POINT2	6

No.	Setting item	On-screen display	IC	Data setting	Initial value
44	B.S. POINT2	BSP2	VCD1	B.S. POINT2	6
45	B.S.G.	BSG	VCD1	B.S.G.	0
46	BLACK LEVEL CORRECT1	BLC	VCD1	B.L.C.	1
47	BLACK LEVEL CORRECT2	BLS	VCD1	B.L.S.	0
48	BLACK DETECT LEVEL	BDL	VCD1	B.D.L.	1
49	DYN. ABL-POINT	DABLP	VCD1	DYN. ABL-POINT	6
50	DYN. ABL-GAIN	DABLG	VCD1	DYN. ABL-GAIN	4
51	ABL-POINT	ABLP	VCD1	ABL-POINT	5
52	ABL-GAIN	ABLG	VCD1	ABL-GAIN	6
53	TOF F0 CHARACTERISTIC	TOF-F	VCD1	TOF F0	0
54	TOF Q CHARACTERISTIC	TOF-Q	VCD1	TOF Q	0
55	SUB-CONTRAST ADJ.	SUB CON	VCD1	SUB-CONTRAST	15
56	BRIGHTNESS SUB ADJ.	SUB BRI	VCD1	BRIGHTNESS	140
57	SUB COLOUR ADJ.	SUB COL	VCD1	SUB-COLOUR	35
58	TINT SUB ADJ.	SUB TIN	VCD1	TINT	55
59	SHARPNESS SUB ADJ.	SUB SHP	VCD1	SHARPNESS	63
60	VOLUME SUB ADJ.	SUB VOL	S-CTRL	VOLUME	80
61	TONE FILTER ADJ.	S-FIL	S-CTRL	SOUND FILTER	0
62	TXT-CONTRAST ADJ.	TXT-CONT	VCD1	TXT-CONTRAST	53
63	TXT-BRIGHTNESS ADJ.	TXT-BRI	VCD1	TXT-BRIGHTNESS	73
64	V-AMPLITUDE (60Hz) ADJ.	V-AMP6	PDC	V-AMPLITUDE	73
65	V-LINEARITY (60Hz) ADJ.	V-LIN6	PDC	V-LINEARITY	22
66	V-S CORRECTION (60Hz) ADJ.	V-S COR6	PDC	V-S CORRECTION	9
67	V-PHASE (60Hz) ADJ.	V-PHS6	VCD1	V-PHASE	3
68	H-PHASE (60Hz) ADJ.	H-PHS6	VCD1	H-PHASE	21
69	H-SIZE (60Hz) ADJ.	H-SIZE6	PDC	H-SIZE	41
70	PLL MODE SETTING	PLL	PLL1/2	TEST	4
71	IGR LEVEL ADJ.	IGR-LVL	IGR	LEVEL	4
72	IGR	IGR-ST	IGR	STEREO	24
73	NICAM ERROR RATE (MAX)	N-ERR MAX	NICAM	ERR-MAX	100
74	NICAM ERROR RATE (MIN)	N-ERR MIN	NICAM	ERR-MIN	35
75	NICAM ERROR	N-AMDIS	NICAM	AMDIS	0
76	V-ENHANCEMENT	V-ENH	DCF	VENH	4
77	COLOUR BAND PASS FILTER	CBPF	DCF	CBPF	0
78	1 LINE DOT IMPROVEMENT	LD	DCF	LD	0
79	CORING	CORING	DCF	COR	0
80	PIP H-DISPLAY POSITION	H-POS	PIP	POS-H2,POS-H	16
81	PIP V-DISPLAY POSITION	V-POS	PIP	POS-V	16
82	PIP SUB TINT	PIP-TINT	VCD2	TINT	35
83	PIP V-POSITION	VSIDLY5	PIP	VSIDEL	10
84	PIP H-POSITION (50Hz)	HSIDLY5	PIP	VSIDEL	3
85	PIP H-POSITION (60Hz)	HSIDLY6	PIP	VSIDEL	2
86	PIP DISPLAY ADJ.	VSPDLY	PIP	VSPDEL	0
87	PIP SEL ADJ.	SELDLY	PIP	SELDEL	2
88	PIP Y-DELAY (PAL)	YDLYP	PIP	YDEL	0
89	PIP Y-DELAY (NTSC)	YDLYN	PIP	YDEL	0

编号	设定项目	在屏表示内容	IC	数据设定	初始值
45	B.S.G.	BSG	VCD1	B.S.G.	0
46	黑色电平校正1	BLC	VCD1	B.L.C.	1
47	黑色电平校正2	BLS	VCD1	B.L.S.	0
48	黑色检测电平	BDL	VCD1	B.D.L.	1
49	DYN.ABL位置	DABLP	VCD1	DYN. ABL-POINT	6
50	DYN.ABL增益	DABLG	VCD1	DYN. ABL-GAIN	4
51	ABL位置	ABLP	VCD1	ABL-POINT	5
52	ABL增益	ABLG	VCD1	ABL-GAIN	6
53	TOF F0特性	TOF-F	VCD1	TOF F 0	0
54	TOF Q特性	TOF-Q	VCD1	TOF Q	0
55	副对比度调节	SUB CON	VCD1	SUB-CONTRAST	15
56	副亮度调节	SUB BRI	VCD1	BRIGHTNESS	140
57	副彩色调节	SUB COL	VCD1	SUB-COLOUR	35
58	副色调调节	SUB TIN	VCD1	TINT	55
59	副鲜明度调节	SUB SHP	VCD1	SHARPNESS	63
60	副音量调节	SUB VOL	S-CTRL	VOLUME	80
61	音调滤波器调节	S-FIL	S-CTRL	SOUND FILTER	0
62	TXT对比度调节	TXT-CONT	VCD1	TXT-CONTRAST	53
63	TXT亮度调节	TXT-BRI	VCD1	TXT-BRIGHTNESS	73
64	垂直幅值(60Hz)调节	V-AMP6	PDC	V-AMPLITUDE	73
65	垂直线性度(60Hz)调节	V-LIN6	PDC	V-LINEARITY	22
66	垂直同步校正(60Hz)调节	V-SCOR6	PDC	V-S. CORRECTION	9
67	垂直相位(60Hz)调节	V-PHS6	VCD1	V-PHASE	3
68	水平相位(60Hz)调节	H-PHS6	VCD1	H-PHASE	21
69	水平尺寸(60Hz)调节	H-SIZE6	PDC	H-SIZE	41
70	PLL状态设定	PLL	PLL1/2	TEST	4
71	IGR电平调节	IGR-LVL	IGR	LEVEL	4
72	IGR	IGR-ST	IGR	STEREO	24
73	NICAM制式误差率(最大)	N-ERR MAX	NICAM	ERR-MAX	100
74	NICAM制式误差率(最小)	N-ERR MIN	NICAM	ERR-MIN	35
75	NICAM制式误差	N-AMDIS	NICAM	AMDIS	0
76	垂直增强	V-ENH	DCF	VENH	4
77	彩色带通滤波器	CBPF	DCF	CBPF	0
78	1象点修补	LD	DCF	LD	0
79	核化	CORING	DCF	COR	0
80	PIP水平显示位置	H-POS	PIP	POS-H2, POS-H	16
81	PIP垂直显示位置	V-POS	PIP	POS-V	16
82	PIP副色调	PIP-TINT	VCD2	TINT	35
83	PIP垂直位置	VSIDLY5	PIP	VSIDEL	10
84	PIP水平位置(50Hz)	HSIDLY5	PIP	HSIDEL	3
85	PIP水平位置(60Hz)	HSIDLY6	PIP	HSIDEL	2
86	PIP显示调节	VSPDLY	PIP	VSPDEL	0
87	PIP选择调节	SELDLY	PIP	SELDEL	2
88	PIP亮度延迟(PAL制式)	YDLYP	PIP	YDEL	0
89	PIP亮度延迟(NTSC制式)	YDLYN	PIP	YDEL	0

No.	Setting item	On-screen display	IC	Data setting	Initial value
90	PIP PLL SETTING	PLLTC	PIP	PLLTC	3
91	PIP FRAME LUMINANCE	YFC	PIP	FRY	10
92	PIP FRAME COLOUR	UFC	PIP	FRV.FRU	0
93	PIP FRAME WIDTH	FRM	PIP	RWIDV,FRWIDH	12
94	OSD POSITION	*	MICON	HR	9
95	STANDARD SOUND SYSTEM	S-SYS	MICON		BG
96	LANGUAGE OPTION SETTING	LANG	MICON		255
97	PAL-TINT SETTING	PAL-TINT	VCD1	TINT	64

*For 60 Hz data, enter the following values in the data set for 50 Hz.

Setting Item	Offset Value
V-AMPLITUDE ADJ.	0
V-LINEARITY ADJ.	0
V-S. CORRECTION	0
V-BIAS	-4
H-PHASE ADJ.	+4
H-SIZE ADJ.	-1

Factory settings and geomagnetic adjustment model by model (reference)

Suffix for model number	Geomagnetism (H,V) nT		Background	Language	S-sys
B	30000	20000	12300K	CHINESE	I
C (SINGAPOLE)	-10000	40000	12300K	ENGLISH	B/G

编号	设定项目	在屏表示内容	IC	数据设定	初始值
90	PIP PLL设定	PLLTC	PIP	PLLTC	3
91	PIP帧亮度	YFC	PIP	FRY	10
92	PIP帧彩色	UFC	PIP	FRV, FRU	0
93	PIP帧宽度	FRM	PIP	FRWIDV, FRWIDH	12
94	在屏表示	*	MICON	HR	9
95	标准音响系统	S-SYS	MICON		BG
96	语言选择设定	LANG	MICON		255
97	PAL制式色调设定	PAL-TINT	VCD1	TINT	64

*1 50Hz数据设定时,必须调节其设定数据而进行60Hz数据的设定。

设定项目	偏移值
垂直幅值调节	0
垂直线性度调节	0
垂直同步校正	0
垂直偏压	-4
水平相位调节	+4
水平尺寸调节	-1

各型号出厂时的初始值和磁场调整（参考）

型号尾标	磁场(水平、垂直)nT		背景	语言	S-sys
B	30000	20000	12300K	中文	I
C (新加坡)	-10000	40000	12300K	英文	B/G

FACTRY SETTINGS

ITEM	DATA SETTING
SKIP	OFF
AFT	ON
C-SYSTEM	AUTO
S-SYSTEM	*1
IGR FORCED FM	N.A.
IGR MODE	N.A.
NICAM FORCED FM	N.A.
NICAM MODE	N.A.
LAST POWER	ON
LAST TV/AV (MAIN/SUB)	TV
DIGIT	2DIG
LANGUAGE	*1
BULE BACK	ON
AV MENU	STANDARD
AUTO SELECT	OFF
LAST POS (MAIN/SUB)	1
LAST FB POS	1
VOLUME	0
BALANCE	0
CONTRAST	INITIAL VALUE OF EACH AV MENU MODE
COLOUR	INITIAL VALUE OF EACH AV MENU MODE
BRIGHTNESS	INITIAL VALUE OF EACH AV MENU MODE
TINT	INITIAL VALUE OF EACH AV MENU MODE
SHARPNESS	INITIAL VALUE OF EACH AV MENU MODE
YNR	INITIAL VALUE OF EACH AV MENU MODE
BKGD	INITIAL VALUE OF EACH AV MENU MODE
TREBLE	INITIAL VALUE OF EACH AV MENU MODE
BASS	INITIAL VALUE OF EACH AV MENU MODE
U-BASS	INITIAL VALUE OF EACH AV MENU MODE
SPATIALIZER	INITIAL VALUE OF EACH AV MENU MODE
TIMER	CLEAR
SAVE	OFF
HEAD PHONE	AUTO (LEVEL: CENTER)
INSET TINT	0
DEMO	OFF
PIP DISPLAY POSITION	LOWER RIGHT

*1: Refer to the Factory Setting at Page 9.
For S-SYSTEM, the following factory settings 1, 2, 3 and 4 can cover all the channels.
1: M 2: B/G 3:I 4: D/K

出厂时的初始值设定

1)按下表所示要求触按与其相应的键钮，以便将各初始值设定于EEPROM之中。

设定项目	数据设定
跳跃设定位置	关
AFT	开
彩色制式设定位置	自动
声音制式设定位置	*1
IGR强制调频设定位置	N.A.
IGR制式设定位置	N.A.
NICAM强制调频设定位置	N.A.
NICAM制式设定位置	N.A.
最后电源开关设定位置	开
最后电视/声象设定位置(主/副)	电视
数字设定位置	二位数
语言设定位置	*1
蓝色背景设定位置	开
声象选定位置	标准
自动选择位置	关
最后设定位置(主/副)	1
最后FB设定位置	1
音量设定位置	0
左右平衡设定位置	0
对比度设定位置	各声象选择项目的初始值
彩色设定位置	各声象选择项目的初始值
亮度设定位置	各声象选择项目的初始值
色调设定位置	各声象选择项目的初始值
鲜明度设定位置	各声象选择项目的初始值
YNR	各声象选择项目的初始值
BKGD	各声象选择项目的初始值
高音设定位置	各声象选择项目的初始值
低音设定位置	各声象选择项目的初始值
超低音设定位置	各声象选择项目的初始值
SPATIALIZER	各声象选择项目的初始值
定时器设定位置	归零
数据保存设定位置	关
头戴耳机设定位置	自动(电平：中央)
副荧屏色调设定位置	0
示范设定位置	关
PIP显示屏设定位置	右下

*1：参见第9页的出厂时的初始值设定。
有关声音制式的设定，当出厂时的初始值为1、2、3及4时，可设定所有频道。
1:M 2:B/G 3:I 4:D/K

SERVICE ADJUSTMENT

■ PIF/AFT/AGC ADJUSTMENT

1. TUNER IFT (preset) ADJUSTMENT: TU201(TU101)

1. Get the tuner ready to receive the E-9CH signal,but with no signal input. Adjust PLL data.
2. Connect the sweep generator's output cable to the tuner antenna. (RF sweep)
3. Adjust the sweep generator's output level to 80dBμV.
4. Connect the responce lead (use a low-impedance probe with wave detector; see ***Fig.1.***) to the tuner's IF output terminal.
   (This terminal must have the probe alone connected.)
5. Set the RF AGC voltage to 0-6V with no contact with waveform.
6. Adjust the tuner IF coil to obtain the waveform as shown in ***Fig.2.***

Note: Be sure to keep the tuner cover in position during this adjustment.

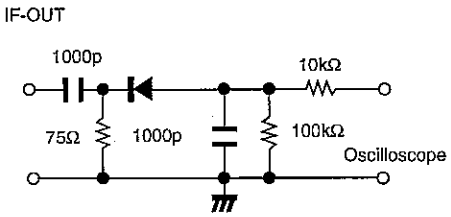


Fig. 1.

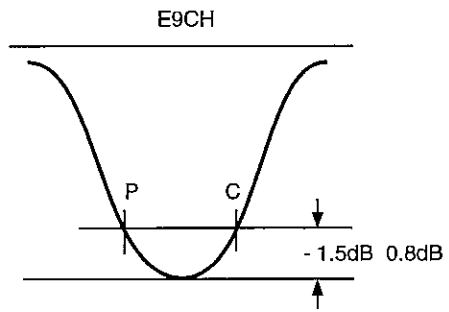


Fig. 2.

2. VCO ADJUSTMENT: T203 (T103)

1. Disconnect the antenna from the tuner antenna terminal.
2. Apply DC voltage at pin (4) (IF ACC) of IC201 (IC101).
   6.0 ± 0.1 V TP202 (TP102)
3. Using a digital voltmeter, measure the DC voltage at pin (20) (PLL FIL) of IC201 (IC101).
   * Prepare a digital voltmeter capable of reading down to the third decimal place.
4. Remove the DC voltage from pin (4) of IC201 (IV101).
5. Reconnect the antenna and receive the E-12CH signal. (With the AFT off, set the receiving frequency to 224.25 MHz.)
6. Connect the DC digital voltmeter to pin (20) of IC201 (IC101). Adjust T203 (T103) to get the voltage measured in the above step ③.
   Allowable error: ± 0.015 V (20 kHz)

Note: Operate PIP when you adjust T103.

保养调整

■ PIF/AFT/AGC的调整

1. 调谐器IFT(预设)的调整:TU201(TU101)

1. 于无信号输入的接收状态下，使调谐器处于接收E-9频道信号之状态。调节PLL数据。
2. 接扫描振荡器输出线圈于调谐器天线接线端(射频扫描)。
3. 调扫描振荡器输出电平为80dBμV。
4. 接响应引线(带有检波器的低阻抗探针；见图1)于调谐器中频输出端。(只接探针于调谐器中频输出端)。
5. 设射频自动增益控制RF AGC的电压值于0至6V间的与波形不接触之位置。
6. 再将调谐器中频线圈所得波形调至图2所示的规定要求。

注意：作此项调整时，必须盖上调谐器盒盖而进行。

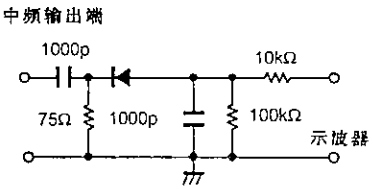


图1

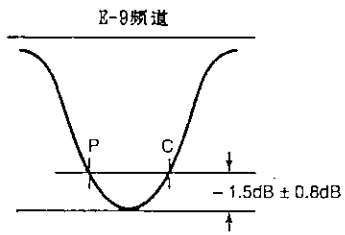


图2

2.压控振荡器VCO自激的调整:T203(T103)

1.从天线接线端拔出天线。
2.对IC201(IC101)的引脚(4)(IF ACC)施加直流电压。
  6.0±0.1V TP202(TP102)
3.用数值式电压计测量IC201(IC101)引脚(20)(PLL FIL)的直流电压值。
  *必须使用可读取小数点3位数的数值式电压计。
4.除去施加于IC201(IC101)引脚(4)的直流电压。
5.插入天线,接收E-12频道信号。
  (AFT处于关闭状态时,将接收频道设定于224.25MHz)
6.接数值式电压计于IC201(IC101)的引脚(20)。
  调节T203(T103),使电压值达至第3.项所测量出的数值。
  容许范围:±0.015V(20kHz)

注：调节T103时，必须设定于双图象状态。

■ PIF/AFT/AGC ADJUSTMENT

3. AFT ADJUSTMENT: T204(T104)

1. Receive the E-12CH (PAL colour bar) signal. If this signal is not available, any signal above the E-5CH band is acceptable.
   •Field strength: 55~80 dBμV
   Make sure the frequency is almost the same as that of the received channel (± 30 kHz).
2. Using the channel setting control, make a frequency of 224.25 MHz appear on the screen. (AFT off)(If any other channel than E-12CH is received, make its frequency on the screen.)
3. Turn T204 (T104) coil clockwise first to have 6V reading and then counterclockwise to get 0.2 V reading.
   Within this range, adjust this coil to reach the voltage below.
4. Adjust T204 (T104) so that the DC voltage at the pin (1) of IC201 (IC101) be 3.3 ± 0.2 V. (See ***Fig. 3.***)

Note: Operate PIP when you adjust T104.

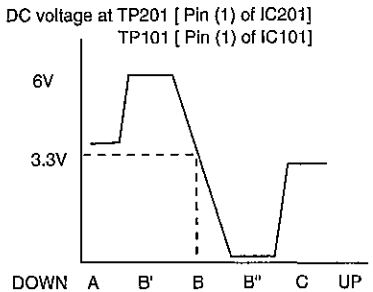


Fig. 3.

* Turn the core counterclockwise for the UP direction, and clockwise for the DOWN direction. Adjust the T204 core to point B (between B' and B"). Point A and C are rejectable.

4. RF AGC CUT-IN ADJUSTMENT: R226 (R116)

1. Receive the E-12CH "PAL COLOUR BAR" signal.
   • Field strength: 57 ± 1 dBμV (75 ohms open)
2. Connect the oscilloscope to P201 (P101), as shown in ***Fig. 4.***
   • Bias box: About 6.5V
3. Turn R226 (R116) to have the highest voltage.
4. Turn R226 (R116) slowly in the oppsite direction untill the voltage goes down 0.1V below the highest level.
5. Adjust the signal level to 63-67 dBμV and make sure there are no noise.
6. Now adjust the signal level to 90-95 dBμV and make sure there is no chrominance modulation beat.

Note: Operate PIP when you adjust R116.
Note: If a 50 ohm field strength meter is used without a 50/75 impedance converter, set the field strength to 55 ± 1 dBμV. Pay attention to a loss that would be cause with the converter.

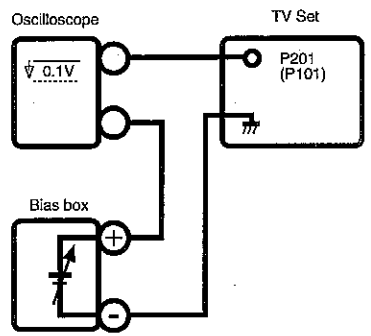


Fig. 4.

5. VIDEO DETECTION LEVEL ADJUSTMENT: R224

1. Receive the "B/G SYSTEM PAL COLOUR BAR" signal (100% white colour bar). Set the S system to B/G.
2. Adjust R224 so that the video output at the AV OUT terminal be 1.0 ± 0.05 Vp-p with a 75-ohm termination.

■ PIF/AFT/AGC的调整

3.自动微调AFT的调整:T204(T104)

1. 接收E-12频道(PAL制式彩条)信号。无E-12频道信号输入时，可用E-5频道以上的频道信号代替。
   ●场强度：55～80dBμV
   必须正确地调节接收频道的频率(±30kHz)。
2. 通过频道设定开关，调荧屏上表示出的频率数值为224.25MHz。(AFT处于关闭状态)。
   (接收除了E-12频道以外的频道信号时，必须采用与其相应的频率)。
3. 以顺时针方向旋转T204(T104)线圈时的初始电压为6V,逆时针方向旋转时的初始电压为0.2V为前提,调节T204线圈,使线圈中央位置的电压值达至下记要求。
4. 调节T204(T104)，使IC201(IC101)引脚(1)处的直流电压值达至3.3±0.2V的规定要求。(见图3)

注：调节T104时，必须设定于双图象状态。

TP201[IC201的引脚(1)]处的直流电压
TP201[IC101的引脚(1)]处的直流电压

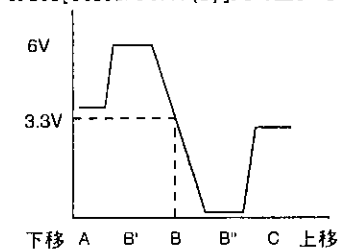


图3

＊磁心为逆时针方向时会上移，若为顺时针方向时则会下移。在B′与B″之间必须将T204的磁心位置调整于B点。(A、C点为NG)

4.射频自动增益控制RF AGC插入的调整:R226(R116)

1. 接收E-12频道“PAL制式彩条”信号。
   ●场强度：57±1dBμV(端接75Ω电阻)
2. 按图4所示要求接示波器于P201(P101)。
   ●偏压器：约6.5V
3. 旋转R226(R116),使所测电压读数达至最大。
4. 相反方向缓慢地旋转R226(R116),将电压读数调至最大值-0.1V之程度。
5. 调信号强度为63～67dBμV，确认无噪声出现。
6. 再调信号强度为90～95dBμV，确认无色度信号调制差拍出现。

注：调节R116时，必须设定于双图象状态。

注意：如果使用不带50/75阻抗转换器的50Ω系统场强度计，该场强度必须定为55±1dBμV。另外，使用转换器时，应考虑由转换器带来的阻抗损失。

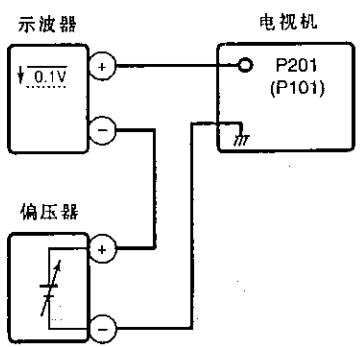


图4

5.视频检波电平的调整:R224

1. 接收“B/G制式PAL彩条”信号(100%白色信号)，设S-制式于B/G位置。
2. 调节R224，使声象输出端处的视频输出强度达至1.0±0.05Vp-p的规定要求(于75Ω接线端)。

注意：用“I制式PAL彩条”信号来进行此项调整时，应设S制式于I位置。

■ DIGITAL COMB FILTER Y LEVEL ADJUSTMENT

1. DIGITAL COMB FILTER Y LEVEL ADJUSTMENT: R5467

1. Input the PAL colour bar (100% white colour bar) signal to AV-IN terminal with a 75 ohm termination (input level 1.0 Vp-p + 0.05Vp-p).
2. Connect the oscilloscope to TP5462 (connector YA pin (7)).
3. Adjust R5467 so that the Y signal (100% white) at TP5462 be 2.0 ± 0.1Vp-p.

Note: Make sure that the signal is linearly amplified overall. (The 100% portion should be kept intact.)

<Reference> Note the voltage level for the adjustment with the E-12CH signal.
To be adjusted to 2.0 Vp-p at TP5462
* Make sure the above value is available after the adjustment No. 5. (See Page 12.)
Input (YB) (2): 2.0 V ± 0.1 Vp-p
Output (YA) (7): 2.0 V ± 0.1 Vp-p

■ PIP (SUB-SCREEN) ADJUSTMENT

1. PIP Y LEVEL ADJUSTMENT: R4938 (on P-in-P unit)

1. Receive E-12CH "PAL COLOUR BAR" signal for the main and PIP.
2. Connect the oscilloscope to TP805(PI (16)) on the main unit.
3. Adjust R4938 so that the 100% white portion in the PIP and that in the main screen be at the same level. (See ***Fig.5.***)
   • Adjustment error: 0 ± 0.02 V.

Note: The level difference between the pedestal and that 100% white portion should be 0.7Vp-p or so.

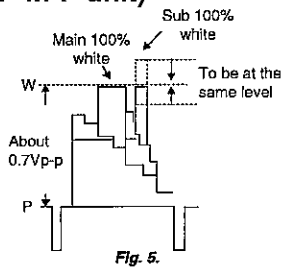


Fig. 5.
H : Horizontal sync
V : 0.1 V/div. (reading)

2. PIP SUB-COLOUR ADJUSTMENT: R4952 (on P-in-P)

1. Receive E-12CH "PAL colour bar" signal for the main and PIP.
2. Connect the oscilloscope to TP804 (PI(14)) on the main unit.
3. Adjust R4952 so that the R-Y red portion in the PIP and that in the main screen be at the same level.(See ***Fig.6.***)

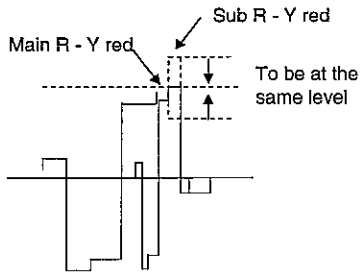


Fig. 6.
H : Horizontal sync
V : 0.1 V/div. (reading)

■ 数字式梳形滤波器亮度信号电平的调试

1.数字式梳形滤波器亮度信号电平的调整:R5467
1.通过75Ω终端向AV输入端输入PAL制式彩色(100%白色)信号。
(输入电平为1.0Vp-p+0.05Vp-p)
2.接示波器于TP5462(插接器YA引脚(7))
3.调节R5467,使TP5462处的亮度信号(100%白色)电平达至2.0±0.1Vp-p的规定要求。

注意:检查整体均呈直线性放大。(100%白色信号部分均为正常)

<参考> 用E-12频道信号检查调整用的电平。
此时,检查TP5462处的电平是否为2.0Vp-p。
*第5项调整结束后,检查上列所测数值是否符合规定要求(见第12页)。
输入电平(YB)(2):2.0V±0.1Vp-p
输入电平(YA)(7):2.0V±0.1Vp-p

■ 双图象(子荧屏)的调试

1.双图象亮度信号电平的调试:R4938
(在双图象(P-in-P)电视机内)
1.接收E-12频道"PAL制式彩条"信号。
2.接示波器于主装置上的TP805(PI(16))。
3.调节R4938,使双图象的100%白色信号电平与主荧屏的100%白色信号电平达至相同程度。
(见图5)
●调整误差:0±0.02V
注意:熄灭脉冲电平与100%白色信号电平间的幅值约为0.7Vp-p。

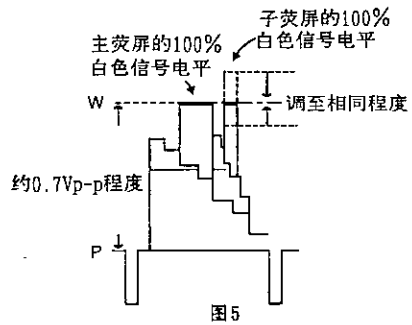


图5
H:水平同步
V:0.1V/段(读数)

2.双图象副彩色的调试:R4952
(在双图象(P-in-P)电视机内)
1.接收E-12频道"PAL制式彩条"信号。
2.接示波器于主装置上的TP804(PI(14))。
3.调节R4952,使双图象的红色亮度信号电平与主荧屏的红色亮度信号电平达至相同程度。
(见图6)

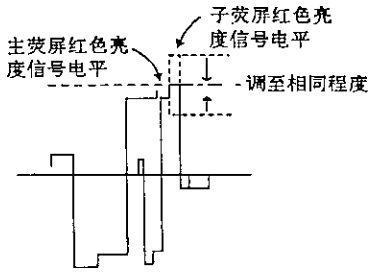


图6
H:水平同步
V:0.1V/段(读数)

■ PIP (SUB-SCREEN) ADJUSTMENT (on the actual TV set)

3. PIP SUB-TINT ADJUSTMENT (I²C bus adjustment)

1. Receive J-8CH "NTSC colour bar" signal for the PIP.
2. Connect the oscilloscope to TP803 (PI(2)) on the main unit.
3. Vary the PIP sub-tint data to get the waveform as shown in ***Fig.7***.
4. Clear the adjustment mode.

Note: Note that this waveform is different from that of the main-screen sub-tint.

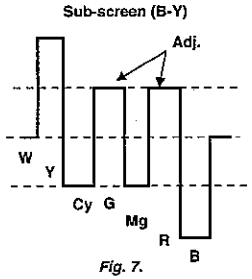


Fig. 7.

■ SOUND ADJUSTMENT

1. SUB SOUND ADJUSTMENT (I²C bus adjustment)

1. Feed the following signal to the AV terminal.Signal: 1 kHz, 1.76 Vp-p (terminated with a 10-kohm impedance), 0.04/-0.06 Vp-p
2. Set the volume control to MAX.
3. Connect the VTVM probe to the S1 connector. (Pin ①: L-ch, pin ②: GND, pin ③: R-ch)
4. Adjust the sub-sound data so that the VTVM should read the following voltage. For the left channel. Adjustment error: 8.0 +0.1 Vrms

Notes:

- **Spatializer off**
- **In the S-Normal mode**
- **S-VOL control at MAX position**

*Use an 8-ohm dummy load.

2. NOISE MUTE CHECKING

1. Receive E-12CH "PAL colour bar" signal.
2. Turn up the volume control to maximum and make sure the sound is heard from the speakers.Then put the unit in the no-signal state.
3. Be sure that the sound mute is effective.
4. Finally turn down the volume control minimum.

■ 双图象(子荧屏)的调试(本装置的安装调整)

3.双图象副色调的调试(I²C总线控制)

1.接收用于双图象屏的J-8频道NTSC制式彩条信号。
2.接示波器于主装置上的TP803(PI(2))。
3.调节双图象副色调数据，使波形达至图7所示的规定要求。
4.解除调整状态。
注意：与主荧屏副色调时的波形有差异。

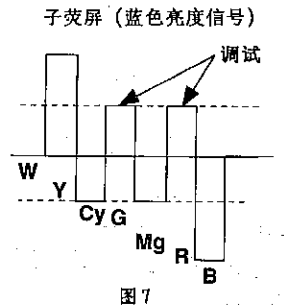


图7

■ 声音制式的调整

1.副声音的调整(I²C总线控制)

1.向AV输入端输入以下信号。信号成分:1kHz 、1.76Vp-p(端接10kΩ电阻),0.04/-0.06Vp-p
2.设音量控制于最大位置
3.接VTVM(电子管电压计)的探针于S1插接端。(引脚①:左声道,引脚②:接地端,引脚③:右声道)
4.调节副声音数据,使VTVM所测读数达至下列所示的规定电压值。(在左声道时)
调整误差:8.0+0.1Vrms

注意：

- ●超立体声控制：OFF位置
- ●标准声音状态位置
- ●音量：最大位置
- ●使用8Ω的假负载。

2.消音功能的检查

1.接收E-12频道“PAL制式彩条”信号。
2.设音量控制于最大位置，接着检查扬声器的声音输出，然后，设电视机于无信号接收状态。
3.此时，检查消音功能是否动作。
4.最后，设音量控制于最小位置。

■ PURITY ADJUSTMENT

1. Receive the white pattern by pattern generator. Set the contrast control to have a beam current of 1.9 mA.
2. Fully degauss the cathode ray tube with the degaussing coil.
3. Set the purity magnet to the zero magnetic field, and roughly adjust the convergence. Now adjust the purity magnet to get the centering rank A.
4. Move the deflection yoke to and fro, and observe the points "a" and "b" as shown in Fig. A with a microscope. Set the landings to 20 µm inside. Insert and drive the wedge to keep the deflection yoke well balanced top and bottom.

4'. If the points "a" and "b" are poorly balanced, correct the centering up to the rank AB.

5. Adjust the raster rotation to 0 eastward.
6. Tighten the deflection coil lock screws.Tightening torque: 108 ± 20 N (11 ± 2 kgf)
7. Check the corners on the cathode ray tube screen. Correct the landings, as required, to the rank A by applying the magnetic sheet.

Note: Make this adjustment after warming up the unit at the beam current of 1900 ± 50 µA for 30 minutes or longer. If any other adjustment is made during the warming-up, warm up the unit for 2 more minutes and start the purity adjustment.

Note: After adjusting the convergence, set the "a" and "b" landings to 20 µm inside in advance.

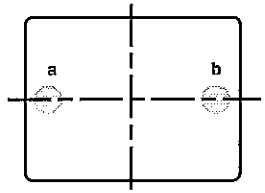
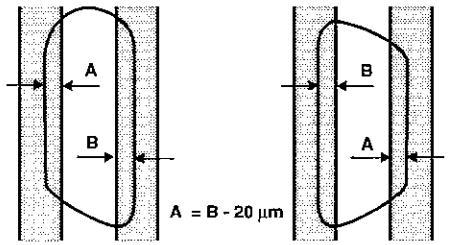


Fig. A



Rank "A" (on the right of the CRT)

Rank "A" (on the left of the CRT)

*1: The deflection yoke position (YPB.is adjusted by setting the "a" and "b" landings.
[20-µm inside point]

■ 色彩纯度的调整

1.通过测试图案发生器接收白色图案信号。调节对比度控制，使电子束电流达至1.9mA。

2.通过消磁线圈对阴极显像管CRT作完全消磁处理。

3.调整色彩纯度控制磁铁,使其磁场磁势为0,对聚焦进行粗调。然后,再通过色彩纯度控制磁铁使对中效果达至A级要求。

4.转动偏转线圈，用放大镜观察 "a"和 "b"位置是否如图A所示.设着屏点于向内侧20µm的位置，再插入和激励楔形束，使偏转线圈保持良好的上下平衡状态。

4.′ 如 "a" 和 "b" 位置平衡效果不佳,提高对中效果等级至AB级。

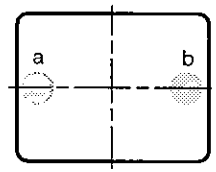
5.调光栅转向为正东0度。

6.旋紧偏转线圈的紧固螺丝,紧固力矩:108±20N(11±2kgf)。

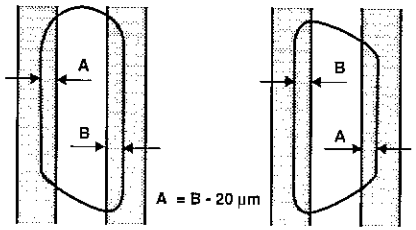
7.检查阴极显像管荧屏角部。如有必要,用磁片校正着屏点,使之达到A级以上的规定要求。

注:进行此项调整之前,应先用1900±50µA电子束电流预热阴极显像管30分钟以上。如在预热期间作了其他项目的调整,那么在调整色彩纯度之前,必须再进行2分钟以上的预热。

注：调整好聚焦度后，超前设 "a"和 "b"着屏点于向内侧20µm的位置。



图A



CRT右侧 "A" 极着屏

CRT左侧 "A" 极着屏

*1:偏转线圈位置(YPB通过 "a" 和 "b" 着屏点调整):
[20µm内侧点]

SURROUNDING PURITY ADJUSTMENT

1. Make sure the deflection yoke (YPB) is positioned well. Receive the crosshatch signal and move the deflection yoke to roughly adjust the YH and YV. (Fix the deflection yoke with the wedge within 30 seconds.)
2. Call up the green-only screen, and set the beam current to 1900 µA.
3. Make sure the landings at the corners are of rank A. If not, apply a purity correction magnet and readjust the landings.

周边色彩纯度的调整

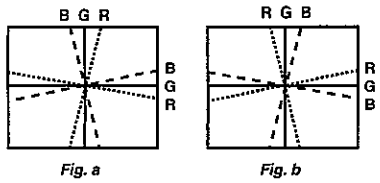
1.确认偏转线圈(YPB)位置正确。接收棋盘图案信号并通过偏转线圈粗调YH和YV。(在30秒内用楔形束固定好偏转线圈。)

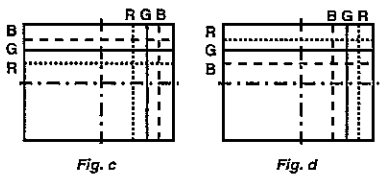
2.设置单绿色全荧屏显示,并设定电子束电流为1900µA。

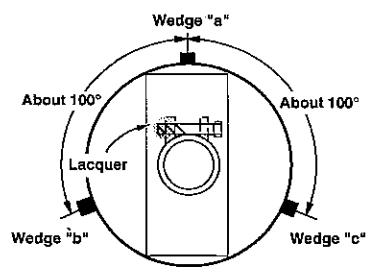
3.在BH为0、BV为产品联系单规定值条件下,确认边角处着屏点是否达到A级要求。如不符要求,用磁铁片贴其之上重调其着屏点。磁场调整请参阅产品联系单中所述。

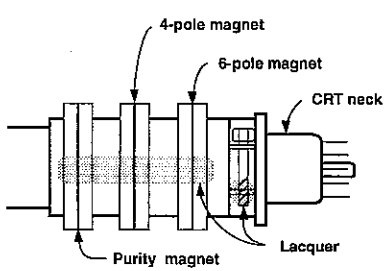
■ CONVERGENCE ADJUSTMENT

(To be done after the purity adjustment)









1. Receive the E-2CH "CROSSHATCH PATTERN" signal.
2. Using the remote controller, call the Normal mode.

STATIC CONVERGENCE

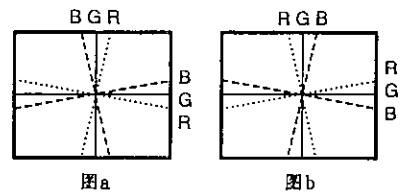
1. Turn the 4-pole magnet to a proper opening angle in order to superimpose the blue and red colours.
2. Turn the 6-pole magnet to a proper opening angle in order to superimpose the green colour over the blue and red ones.

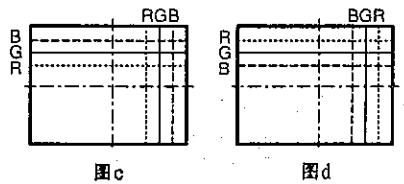
DYNAMIC CONVERGENCE

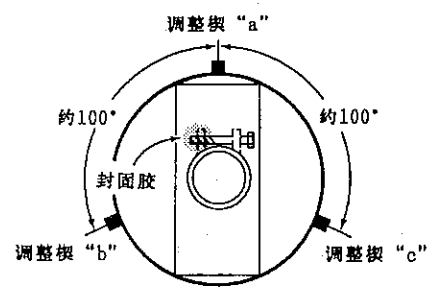
1. Adjust the convergence on the fringes of the screen in the folloeing steps.
   a) Fig. a: Drive the wedge at point "a" and swing the deflection coil upward.
   b) Fig. b: Drive the wedge at points "b" and "c" and swing the deflection coil downward.
   c) Fig. c: Drive the "c"wedge deeper and swing the deflection coil rightward.
   d) Fig. d: Drive the "b"wedge deeper and swing the deflection coil leftward.
2. Fix all the wedges on the CRT and apply glass tape over them.
3. Apply lacquer to the deflection yoke lock screw, magnet unit (purity, 4-pole and 6-pole magnets) and magnet unit lock screw.

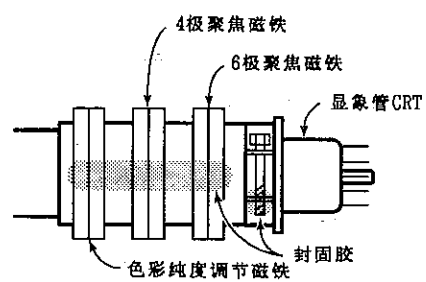
■ 画面聚焦度的调整

(此项调整必须于色彩纯度磁铁调整完毕后进行)。









1. 接收 E-2频道 "棋盘格测试图案" 信号。
2. 通过遥控器设电视机于标准状态。

静聚焦度的调整

1. 调节4极聚焦磁铁的开角与转角,使蓝色线条与红色线条重叠。
2. 调节6极聚焦磁铁的开角与转角,使绿色线条与蓝、红色重叠线条重叠。

动聚焦度的调整

1. 按下述要求调节荧屏周边的聚焦度。
   a) 图a:插调整楔于 "a",向上摆动偏转线圈加以调节。
   b) 图b:插调整楔于 "b" 和 "c",向下摆动偏转线圈加以调节。
   c) 图c:深插调整楔 "c",向右摆动偏转线圈加以调节。
   d) 图d:深插调整楔 "b",向左摆动偏转线圈加以调节。
2. 贴三支调整楔于显象管CRT上, 用玻璃胶带固定之。
3. 加封固胶于偏转线圈的固定螺丝、磁铁装置(色彩纯度调节磁铁、4极与6极聚焦磁铁)以及磁铁装置的固定螺丝, 封固之。

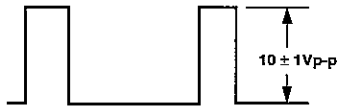
■ CRT CUT-OFF, BACKGROUND AND SUB-CONTRAST ADJUSTMENT

1. CRT CUT-OFF ADJUSTMENTS

Adjusting Point

■ Sub-Brightness: R890

1. Receive E-5CH "MONOSCOPE PATTERN" signal.
2. Using the remote controller, call up the Video Normal mode.
3. Go to the service mode (Make short-circuit between TP1001 and TP1002.) and select the cut-off/background mode.
4. Connect the oscilloscope to TP852 (RED cathode).
5. Set the screen control to 0/10 position.
6. Press the "•/••" key on the remote controller to reach the horizontal centering mode.
7. Adjust the sub-brightness control (R890) so that the blanking pulse on the oscilloscope screen be 10 ± 1Vp-p.



8. Disconnect the oscilloscope from TP852.
9. Turn the screen control counterclockwise until the horizontal raster glimmers.
10. Adjust the cut-off data of the other two colours until the horizontal raster becomes whitish.

Note: The data can be turned up and down with the above keys.

- **R CUT OFF UP "1" key**
- **G CUT OFF DOWN "5" key**
- **R CUT OFF DOWN "4" key**
- **B CUT OFF UP "3" key**
- **G CUT OFF UP "2" key**
- **B CUT OFF DOWN "6" key**

11. Turn the screen control counterclockwise until the horizontal raster disappears.

Note:Before starting this adjustment, warm up the unit for 30 minutes or longer at a beam current of 1900 ±50μA.

12. Press the "•/••" key on the remote controller to call the normal mode.

2. WHITE BALANCE and BACKGROUND (I²C bus adjustment)

1. Receive the E-5CH "MONOSCOPE PATTERN" signal.
2. Using the remote controller, call the Video Normal mode.
3. Connect the ammeter between TP601 and TP602.
4. Roughly adjust R1631 (Max beam adjustment) to have a beam current of about 1.9 mA.
5. Receive the J-12CH (window pattern) signal. (Or receive the white balance pattern signal.)
6. Adjust the G-drive and B-drive data to have a colour temperature of 12,300°K. (white).
   •12,300°K. X: 0.272
   Y: 0.275

(with a Minolta colour temperture meter CA-100)

Note:The data can be turned up and down with the above keys.

- **G-DRIVE UP "7" key**
- **B-DRIVE UP "8" key**
- **G-DRIVE DOWN "↵" key**
- **B-DRIVE DOWN "0" key**

7. Using the R-CUT OFF, G-CUT OFF, and B-CUT OFF controls, adjust the white/dark portion to 12,300°K.
8. Readjust the color temperature at the white peak.
9. Check the white/dark portion to make sure the colour temperature is 12,300°K.

Note:Before starting this adjustment, warm up the unit for 30 minutes or longer at a beam current of 1900 ±50μA.

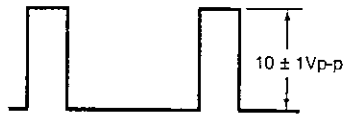
■ CRT截止、蓝色背景以及副对比度的调整

1. CRT截止的调整

调整点

■ 副亮度：R890

1. 接收E-5频道“单象管图案”信号。
2. 通过遥控器设电视机于影像标准状态。
3. 进入保养调整状态(短接TP1001与TP1002之间)，然后选择截止/蓝色背景状态。
4. 接示波器于TP852（红色阴极）。
5. 设荧屏控制于最小位置(0/10)。
6. 触按遥控器上的“·/··”键以选择水平中心状态。



7. 调节副亮度控制(R890)，使示波器上的消隐脉冲幅值达至10 ± 1Vp-p的规定要求。
8. 拆去示波器与TP852的连接。
9. 顺时针方向旋转荧屏控制旋钮，直至荧屏上微弱地出现水平光栅为止。
10. 调节其它两色的截止数据，使荧屏上的水平光栅变为白色。

注意：用下记数字键钮可进行数据的上移或下移工作。

- ●红色截止的上移：“1”键钮 ●绿色截止的下移：“5”键钮
- ●红色截止的下移：“4”键钮 ●蓝色截止的上移：“3”键钮
- ●绿色截止的上移：“2”键钮 ●蓝色截止的下移：“6”键钮

11. 逆时针方向旋转荧屏控制旋钮，直至荧屏上的水平光栅完全消失为止。

注意：作此项调整之前，先用1900 ± 50μA的电子束电流预热CRT30分钟以上。

12. 触按遥控器上的 “·/··”键钮以选择NORMAL(标准）状态。

2. 白色平衡、蓝色背景及I²C总线的调整

1. 接收E-5频道“单象管图案”信号。
2. 用遥控器呼叫标准图象状态。
3. 接安培计于TP601与TP602之间。
4. 粗调R1631(最大电子束控制)，使电子束直流达至1.9mA左右。
5. 接收J-12频道(窗口图案)信号。(或者，接收白色平衡图案信号)。
6. 调节绿色激励和蓝色激励数据，以获得色温为12300° K的白色。
   ●12300° K X:0.272
   Y:0.275
   (美能达色温计所测)

注意：用下记数字键钮可进行数据的上移或下移工作。

- ●绿色激励的上移：“7”键钮 ●蓝色激励的上移：“8”键钮
- ●绿色激励的下移：“↵”键钮 ●蓝色激励的下移：“0”键钮

7. 用红色截止、绿色截止及蓝色截止控制来调节白色/暗色部分为12300° K的色温。
8. 重调白色电平峰值处的色温。
9. 检查白色/暗色部分的色温是否为12300° K的规定要求。

注意：作此项调整之前，先用1900 ± 50μA的电子束电流预热CRT30分钟以上。

*关于色温，参见出厂前的设定表。

■ CRT CUT-OFF, BACKGROUND AND SUB-CONTRAST ADJUSTMENT (Continued)

3. MAX BEAM ADJUSTMENT : R1631

1. Receive the E-5CH "MONOSCOPE PATTERN" signal.
2. Using the remote controller, call the Video Normal mode.
3. Connect the ammeter between TP601 and TP602.
   - Ammeter's full scale: 3mA range
   - Ammeter's positive (+) read: TP601
   - Ammeter's negative (-) read: TP602
4. Adjust R1631 so that the beam current be 2.0 mA.

Note: Before starting this adjustment, warm up the unit for 30 minutes or longer at a beam current of 1900 ± 50μA.

4. SUBBRIGHTNESS (I^2C bus adjustment)

1. Receive the JA12CH (window pattern) signal.
2. Using the remote controller, call up the normal video mode.
3. With a brightness meter (with "Y" of CA - 100), adjust the sub-brightness control so that the right-hand dark/white portion be 1.8 cd.

■ HORIZONTAL AND VERTICAL CIRCUIT ADJUSTMENT

1. MAIN PICTURE ADJUSTMENT

For this items 1 thru 6 below, use the remote controller in the service mode.

1.	V-AMPLITUDE 50:	Adjust the overscan 8.5% (E-5).
2.	V-LINEARITY 50:	Adjust to get the best linearity.
3.	V-S-CORRECTION 50:	Preset (readjust if the linearity is poor).(10)
4.	V-PHASE 50 (V-CENTER):	Align the screen center with CRT's geometrical center (E-5)
5.	H-PHASE 50 (H-CENTER):	Align the screen center with CRT's geometrical center (E-5)
6.	H-SIZE:	Adjust the overscan 8.5% (E-5).
7.	EW-PALABOLA (SIDE-PIN):	Adjust so that the second vertical lines from the left and right ends of the cross-hatch pattern be straight (E-2).
8.	V-BIAS:	Preset (7)
9.	V-S-CORRECTION:	Preset (15)
10.	EW-CORNER (SUB-SIDEPIN):	Adjust so that the end of the crosshatch pattern be straight.
11.	TRAPEZIUM:	Preset (Readjust ifnthe trapezium is poor). (25)
12.	V-COMPENSATION:	Preset (5)
13.	H-COMPENSATION:	Preset (5)
14.	Others:	For the V-AMPLITUDE 60, V-LINEARITY 60, V-S-CORRECTION 60, V-PHASE 60, H-PHASE60, and H-SIZE 60 adjustment, their corrected data are automatically entered when the corresponding 50 Hz mode adjustments are made.

The signals of the receive channnels in paretheses are follows.
(E-2):Crosshatch pattern (50Hz) (E-5):Monoscope pattern (50Hz)
If an error is too much in checking any of the 60Hz items, readjust the item in 60Hz mode

■ CRT截止、蓝色背景以及副对比度的调整(接上页)

3.最大电子束的调整:R1631

1.接收E-5频道“单象管图案”信号。
2.通过遥控器选择标准图象状态。
3.接安培计于TP601与TP602之间。
- ●安培计测示范围：3mA
- ●TP602于安培计正（+）侧
- ●TP601于安培计负（—）侧

4.调节R1631，使电子束电流达至2.0mA。

注意:作此项调整之前,先用1900±50μA的电子束电流预热CRT30分钟以上。

4.副亮度I^2C母线的调整

1.接收JA12频道(窗形图案)信号。
2.用遥控器设定标准视频状态。
3.用亮度计(用CA-100的“Y”),旋转副亮度调节钮,使右手黑色/白色比例为1.8cd。

■ 水平同步电路及垂直同步电路的调整

1.主图像的调整

本节下述的1～6项目数据的调整，由遥控器进行保养调整状态的调整。

1.垂直高度50：	进行调整，使过扫描达至8.5% (E-5).
2.垂直线性度50：	进行调整，使垂直线性度达至最佳状态。
3.垂直同步校正50：	预设（线性度不良时，重新调整之。）(10)
4.垂直相位50(垂直中心)：	通过CRT的几何中心与荧屏中心对齐进行调整。(E-5)
5.水平相位50(水平中心)：	通过CRT的几何中心与荧屏中心对齐进行调整。(E-5)
6.水平尺寸：	进行调整，使过扫描达至8.5% (E-5).
7.E/W抛物面(两侧枕形畸变)：	通过拉直棋盘格测试图案左右两端的第二条垂直线条进行调整。(E-2)
8.垂直偏转：	预设(7)
9.垂直同步校正：	预设(15)
10.E/W角部(副两侧枕形畸变)：	预设（若有显著地不正常之处，便进行调整）
11.梯形失真：	预设(如梯形效应不佳,重新调整之)(25)
12.垂直补偿：	预设(5)
13.水平补偿：	预设(5)
14.其它：	对于60Hz的垂直高度60、垂直线性度60、垂直同步校正60、垂直相位60、水平相位60以及水平尺寸60项目的调整,只要50Hz的其相应项目的调整完毕,其调整便随之自动完成。

■ HORIZONTAL AND VERTICAL CIRCUIT ADJUSTMENT

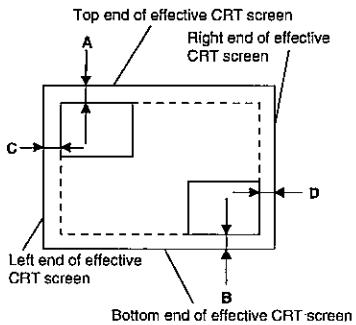
2. FOCUS ADJUSTMENT

1. Receive the E-5CH "MONOSCOPE PATTERN" signal.
2. Using the remote controller, call the Video Normal mode.
3. Adjust the focus control so that the "SHARP" at the upside of the screen.

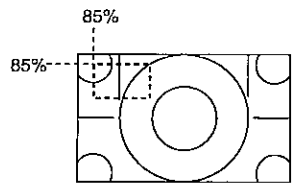
■ SUB-SCREEN POSITION ADJUSTMENT

1. H-POSITION (H-POS), V-POSITION (V-POS) (I^2C bus adjustment)

1. H-Position
   The data has been factory-set.
   If the sub-screens in the four corners are horizontally malpositioned, readjust data so that the right and left margins be the same.
   For the adjustable range, see the figure at right.
2. V-Position
   The data has been factory-set.
   If the sub-screens in the four corners are vertically malpositioned, readjust data so that the top and bottom margins be the same.
   For the adjustable range, see the figure at right.
   * The horizontal and vertical positions are adjusted in order to offset the entire range.



<adjustment procedure>
Make sure the screen size (H/V), centering (H/V), linearity (V), parabolism (H), and parabolic corner (H) are all well adjusted. Receive the E-5CH master screen signal. Adjust the left and top margins of the upper left sub-screen to 85%. (See the figure at right.)
Note that raster rotation must be considered too.



2. SUB H-PHASE 50Hz (HSIDLY5)

1. The data has been factory-set.(E-5)
   If the picture is noticeably degraded, readjust the data so that the left and right overscans in the sub-screen be the same.

3. SUB H-PHASE 60Hz (HSIDLY6)

1. The data has been factory-set.
   When the SUB-H-SHIFT (50) data is adjusted, the corrective data is automatically programmed.

■ 水平同步电路及垂直同步电路的调整

2.焦点的调整

1.接收E-5频道“单象管图案”信号。

2.通过遥控器选择标准图象状态。

3.调节焦点控制,使“SHARP”的字样呈现在荧屏上端。

■ 子荧屏表示位置的调试

1.水平位置(H-POS),垂直位置(V-POS)
(IC²总线控制)

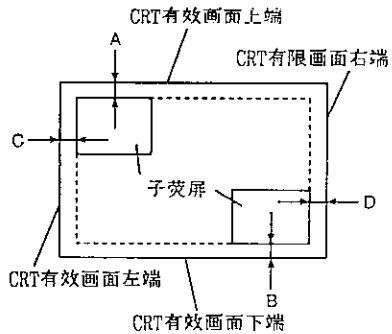
1.水平位置

1.出厂时已作数据的预设。
在子荧屏四个角的表示位置之水平方向有偏移现象时，调节水平位置，使左右的空白部分达至相同程度。调整范围参见右图。

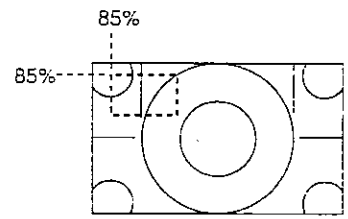
2.垂直位置

2.出厂时已作数据的预设。
在子荧屏四个角的表示位置之垂直方向有偏移现象时，调节垂直位置，使上下的空白部分达至相同程度。调整范围参见右图。

＊水平/垂直位置以整个移动范围来移动偏移部分。



〈调整步骤〉
确认荧屏尺寸(垂直/水平)、中心度(垂直/水平)、线性度(垂直)、抛物面度(水平)、以及抛物面端角(水平)已经调整完毕。接收E-5频道主荧屏信号。调整左上副荧屏的左上区域至85%。(见右图)
注意,光栅转向也应该加以考虑。



2.副水平相位50Hz(HSIDLY5)

1.出厂时已作数据的预设。(E-5)
画面质量极劣时，调节副水平相位控制，使子荧屏内的左右过扫描达至相同程度。

3.副水平相位60Hz(HSIDLY6)

1.出厂时已作数据的预设。
调节副水平相位控制(50Hz)，便自动地输入修正数据。

■ PAL CHROMA ADJUSTMENT

1. SUB-COLOUR ADJUSTMENT
(I²C bus adjustment, main picture)

1. Receive E-12CH "PAL colour bar" signal.
2. Using the remote controller, call the Video Normal mode.
3. Connect the oscilloscope to TP852 (RED cathode). (Use a 10:1 probe.)
   •Range: 2V/div.
   •Sweep time: 20µsec/div.
4. Using the remote controller, call the sub-colour adjustment mode. Adjust the sub-colour data so that the 75% white and red portions of the PAL colour bar be at the same level. See ***Fig.9.***

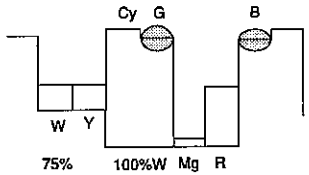
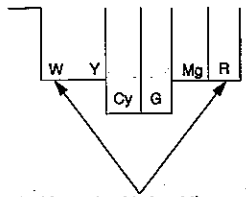


Fig. 8.



75% white and red to be at the same level.

Fig. 9.

■ NTSC CHROMA ADJUSTMENT

1. SUB-TINT ADJUSTMENT
(I²C bus adjustment, main picture)

1. Call the sub-tint adjustment mode.Rceive the JA-8CH "NTSC COLOUR BAR" signal.
2. Connect the oscilloscope to TP806 (B-Y)
   •Range: 20mV/div.(AC)
   •Sweep time: 20µsec/div.
   (Use a 10:1 probe.)
3. Adjust the sub-tint data to obtain the waveform as shown in ***Fig.10.***
4. Clear the adjustment mode.

Note: TP806.....IC801 55pin

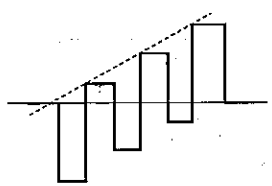


Fig.10.

■ PAL制式色度信号电路的调整

1.副彩色的调整
(I²C总线控制，主荧屏)
1.接收E-12频道“PAL制式彩条”信号。
2.通过遥控器选择标准图象状态。
3.接示波器于TP852(红色阴极)。(使用10：1的探针)
●测示范围：2V/段
●扫频时间：20微秒/段
4.通过遥控器选择副彩色调整状态。然后，调节副彩色数据，使PAL制式彩条信号中的75%白色信号电平与红色信号电平一致。见图9。

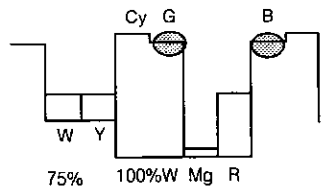
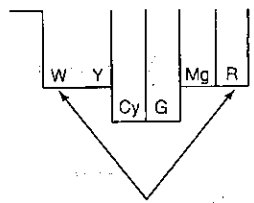


图8



使75%白色信号与红色信号的电平值相同

图9

■ NTSC制式色度信号电路的调整

1.副色调的调整
(主荧屏，I²C总线控制，子荧屏)
1.呼叫副色调调整状态，然后接收JA-8频道“NTSC制式彩条”信号。
2.接示波器于TP806(蓝色亮度)
●测示范围：20mV/段(交流电)
●扫频时间：20微秒/段
(使用10：1的探针)
3.调节副色调数据，以获得图10所示的波形。
4.取消此项调整状态的设定。
注意:TP806---IC801的引脚55

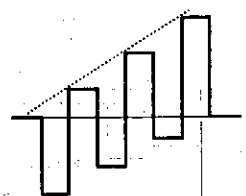


图10

■ SIF (NICAM) ADJUSTMENT

1. VCO COIL ADJUSTMENT: T2302

1. Receive the E-69CH (PAL COLOUR BAR) signal.
2. Adjust T2302 so that the DC voltage of connecter (NI) pin (2) (TP204 located on the main unit or TP2303 located on NICAM unit) be 2.5 ± 0.1V.

■ SIF (IGR) ADJUSTMENT

1. AUDIO LEVEL : R2371

Adjusting conditions
- 191A video colour bar signal, 87.5% mod.
- M1, M2, 400Hz, 30 KHz dev.
- TWO SOUND mode (press the M1 or M2 switch)
- RF output, 80 dBμ

1. Set the unit's bilingual mode switch to "MAIN" or "MAIN + SUB".
2. Terminate the AUDIO OUT (L) terminal with 10k-ohm impedance. Adjust the AUDIO LEVEL control (R2371) so that the waveform on the synchroscope be as follows.
   Adjustment range: 1.32 Vp-p ± 0.04 Vp-p

Notes
- 1.Make sure that "MAIN" or "MAIN + SUB" appears on the OSD screen.
- 2.Make the setting of 1.76 Vp-p at 40 kHz deviation.

<Reference>
For the NICAM/IGR unit alone, the voltage at pin (17) (L-OUT(NI)) should be 1.36 ± 0.04 Vp-p.

2. SEPARATION: R2339

Under the same signal conditions as above, set thesignal generator to the STEREO mode (press the L or R switch).
Turn off the MONO1(L) audio signal.
*Press the S switch and make sure the meter indicates 5 kHz deviation.

1. Set the unit to the STEREO mode.
2. Terminate the AUDIO OUT(L) terminal with a 10-kohm impedance.Adjust the SEPARATION control (R2339) to make the 400-Hz waveform the smallest.

Notes
- Make sure the STEREO appears on the screen.

■ 中音频SIF(NICAM制式)的调整

1.压控振荡器VCO线圈的调整：T2302
1.接收E-69频道(PAL制式彩条)信号。
2.调节T2302，使插接器(NI)脚(2)(TP204位于本电视机，或者，TP2303位于NICAM电视机)处的直流电压值达至2.5±0.1V的规定要求。

■ 中音频SIF(IGR制式)的调整

1.音频电平：R2371
调整条件：
191A视频彩条信号：87.5%调制
M1、M2：400Hz，30kHz偏转
双音频设定状态(触按M1或M2开关)
射频输出：80dBμ
1.设电视机于主语言“MAIN”或主语言“MAIN”十副语言“SUB”的两种语言设定状态。
2.通过10kΩ阻抗，端接音频输出端(左侧)。调节音频电平控制(R2371)，使同步示波器所测的读数达至下列所示的规定要求。
调整范围：1.32Vp-p±0.04Vp-p
注意：
1.检查在OSD荧屏上是否出现“MAIN”或“MAIN+SUB”文字。
2.在40kH偏转时的设定值为1.76Vp-p。

（参考）
单独使用NICAM/IGR制式电视机时，脚(17)(左侧输出端(NI))处的电压值为1.36±0.04Vp-p。

2.音频信号分离：R2339
在与上列相同的信号条件下设定信号发生器于STEREO(立体声)状态，(触按L(左)或R(右)开关)。切断MONO1(L)音频信号。
触按S开关以检查所测数值为5kHz偏转。
1.设电视机于STEREO(立体声)状态。
2.通过10kΩ阻抗，端接音频输出端(左侧)。
调节分离控制(R2339)，使400Hz波形达至最小程度。
注意：
检查荧屏上是否出现STEREO(立体声)的文字。

■ SECAM CHROMA ADJUSTMENT

1. BELL FILTER fo ADJUSTMENT (I²C bus adjustment)

1. Receive the OI-5CH "SECAM COLOUR BAR" signal.
2. Call the bell filter fo adjustment mode.
3. Connect the oscilloscope to pin (21)(TP901) of IC901.
   •Range: 10mV/div. (AC)
   •Sweep time: 20µsec/div.
4. Adjust the bell filter data to have a waveform, the shape of whitch closest to the ***Fig.11.***

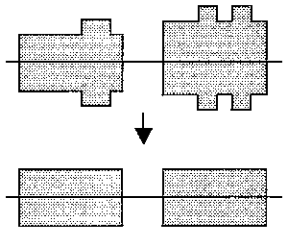


Fig. 11.

2. SECAM BLACK LEVEL (R-Y/B-Y) ADJUSTMENT (I²C bus adjustment)

1. Receive the OI-5CH "SECAM COLOUR BAR" signal.
2. Call the SECAM R-Y adjustment mode.
3. Connect the oscilloscope to pin (11)(R-Y OUT,TP801) of IC901.
   •Range: 10mV/div.
   •Sweep time: 20µsec/div.
   (Use a 10:1 probe.)
4. Adjust the R-Y data so that the offset between the no-signal and the signal line be minimum.See ***Fig.12.***
5. Call the SECAM B-Y adjustment mode.
6. Reconnect the oscilloscope to pin (10) (B-Y OUT, TP802) of IC901. Take the same conditions as in step 3 above.
7. Adjust the B-Y data so that the offset between the no-signal and the signal line be minimum.See ***Fig.12.***

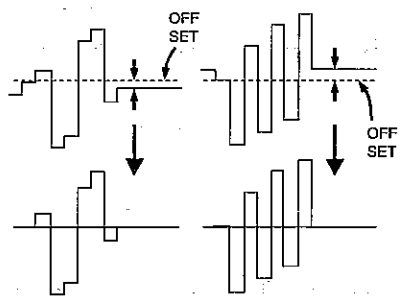


Fig. 12.

■ SECAM制式色度信号电路的调整

1.贝尔滤波器f0的调整
(I²C总线控制)

1.接收OI-5频道“SECAM制式彩条”信号。
2.呼叫贝尔滤波器fo调整状态。
3.接示波器于IC901的引脚(21)(TP901)。
・测试范围:10mV/段
・扫频时间:20微秒/段
4.调节贝尔滤波器数据,以获得近似于图11所示的波形。

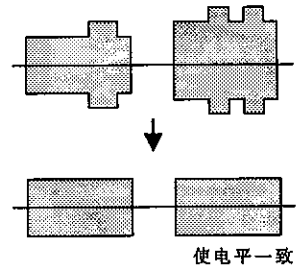


图11

2.SECAM制式黑色信号电平(R-Y/B-Y)的调整
(I²C总线控制)

1.接收OI-5频道“SECAM制式彩条”信号。
2.呼叫SECAM制式红色亮度调整状态。
调整状态。
3.接示波器于IC901的引脚(11)(红色亮度信号输出端,TP801)。
・测试范围:10mV/段
・扫频时间:20微秒/段
(使用10:1的探针)
4.调节红色亮度数据,使无信号线条与信号线条间的误差幅值达至最小。见图12。
5.呼叫SECAM制式蓝色亮度调整状态。
6.重新接示波器于IC901的引脚(10)(蓝色亮度信号输出端, TP802)。按与3.项相同的条件进行。
7.调节蓝色亮度数据,使无信号线条与信号线条间的误差幅值达至最小。见图12。

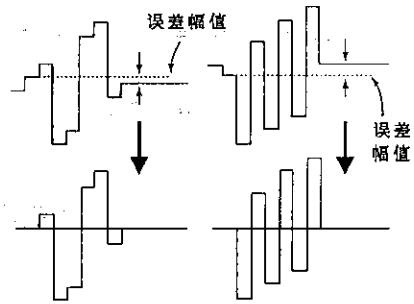


图12

■ A/V INPUT AND OUTPUT CHECK

1. AUDIO/VIDEO OUTPUT CHECK

1. Receive the E-12CH "PAL COLOUR BAR" signal (100% white colour bar, sound 400Hz, 100% mod.).
2. Terminate the video output with a 75-ohm impedance. Make sure the output is as specified (1.0Vp-p ± 3dB).
3. Terminate the audio output with a 10k-ohm impedance. Make sure the output is as specified (1.76Vp-p ± 3dB).

2. AUDIO/VIDEO INPUT CHECK, S-TERMINAL INPUT CHECK

1. Using the TV/VIDEO key on the remote controller, make sure that the modes change in order of TV, AV1, AV2, AV3 and TV again and that the video and audio outputs are according to the input and output terminals for each mode.
2. In the AV1 mode, connect the connector to the S-VIDEO input terminal. Make sure the AV mode changes to the S-VIDEO mode, that the unit functions well, and that "AV1-S" appears on the screen.

3. AV3 AUTOMATIC SELECT CHECK

1. Using the remote controller, receive a TV broadcast signal.
2. Feed the signal to the AV3 VIDEO input terminal. Make sure the AV3 mode shows up automatically.

*Setting:AUTO SELECT to be turn on.

■ PROTECTOR PERFORMANCE CHECK

1. BEAM PROTECTOR

1. Receive the E-5CH "MONOSCOPE PATTERN" signal.
2. Set the contrast control to maximmum.
3. Set the brightness control to maximum.
4. Make a short-circuit between the collector and emitter of Q853 and make sure that the protector is activated and the stand-by mode is called.

2. HIGH-VOLTAGE PROTECTOR

1. Receive the E-5CH "MONOSCOPE PATTERN" signal.
2. Connect the bias box to the cathode (R1625 side) of D1607.
3. Adjust the bias box voltage to 16V and make sure that the protector is not activated.
   •Reference: Usual activate voltage is 19.7V.
4. Boost the bias box voltage to 24V and make sure that the protector is activated.

3. OTHER PROTECTORS

1. In checking the performance of other protectors – for example, the one against shorting of smoothing electolytic capacitor of + B line (pay attention not to damage or deteriorate element).

■ 音频/视频信号输入、输出的检查

1. 音频/视频信号输入、输出的检查
   1. 接收E-12频道“PAL制式彩条”信号。(100%白色彩条,声音：400Hz、100%调制)。
   2. 检查视频信号输出端的电阻为75Ω时的信号强度是否满足标准值的1.0Vp-p ± 3dB的规定要求。
   3. 检查音频信号输出端的电阻为10kΩ时的信号强度是否满足标准值的1.76Vp-p ± 3dB的规定要求。

2. 音频/视频/S-视频端输入的检查
   1. 相继触按遥控器上的电视与影象切换(TV/VIDEO)键，检查电视机信号输入频道是否按电视频道(TV)，影象1频道(AV1)、影象2频道(AV2)、影象3频道(AV3)以及电视频道(TV)的顺序循环切换。并且，检查每一设定时的荧屏图象以及声音输出是否正常地与设定输入频道对应。
   2. 在AV1状态下,插插头于S-VIDEO输入插孔。
      确认音影AV状态是否切换至S-VIDEO状态。同时,确认“AV1-S”字样是否表示于荧屏。

3. AV3自动选择的检查
   1. 通过遥控器,让电视机接收电视播放信号。
   2. 向AV3视频输入插孔输入影像信号。确认“AV3”字样是否表示于荧屏。

*设定:自动选择(AUTO SELECT)打开

■ 保护电路性能的检查

1. 电子束保护电路
   1. 接收E-5频道“单象管图案”信号。
   2. 设对比度控制于最大位置。
   3. 设亮度控制于最大位置。
   4. 短接Q853的集电极和发射极。检查这时的电子束保护电路是否被激励动作，电视机是否被置于准备状态。
2. 高压保护电路
   1. 接收E-5频道“单像管图案”信号。
   2. 连接偏压器于D1607的阴极(R1625侧)。
   3. 调偏压器电压为16V,确认这时的高压保护电路是否被激励动作。
      ●参考值：通常工作电压为19.7V。
   4. 再调整偏压器电压为24V,确认这时的高压保护电路是否被激励动作。
3. 其它保护电路
   1. 在通过短接＋B线路等的平流电解电容器进行该保护电路的检查时，注意切勿损伤、损坏电路元件。

PERFORMANCE CHECK (VIDEO AND AUDIO)

NO.	CHECK POINT	PROCEDUER AND CONDITIONS	NOTE, etc.
1	CONTRAST	① Receive the E-5CH signal. ② Select CONTRAST in the Menu. ③ Using the UP/DOWN keys, make sure the contrast changes accordingly.	
2	COLOUR	① Receive the J-13CH signal. ② Select COLOUR in the Menu. ③ Using the UP/DOWN keys, make sure the colour changes accordingly. (At the MIN position, there must be no color.)	
3	BRIGHTNESS	① Receive the E-5CH signal. ② Select BRIGHT in the Menu. ③ Using the UP/DOWN keys, make sure the black level changes accordingly.	
4	TINT	① Receive the J-13CH signal. ② Select TINT in the Menu. ③ Using the UP key, make sure the tint changes toward green. With the DOWN key, make sure it changes toward red.	For this item, check the sub-screens too.
5	NORMAL	① In the Picture and Sound adjustment mode, press the Normal key to make sure the displayed content alone appears normal.	
6	SHARPNESS	① Receive the E-5CH signal. ② Select SHARPNESS in the Menu. ③ Using the UP/DOWN keys, make sure the sharpness changes accordingly.	
7	CHANNEL SIGN	① Make sure all the channel (0 thru 99) signs appear DISPLAY COLOUR green (with the AFT on).	
8	TREBLE	① Receive the E-5CH signal. ② Select TREBLE in the Menu of sound adjustment. ③ Using the UP/DOWN keys, make sure the treble changes accordingly.	
9	BASS	① Receive the E-5CH signal. Keep the U-BASS off. ② Select BASS in the Menu of sound adjustment. ③ Using the UP/DOWN keys, make sure the bass changes accordingly.	
10	BALANCE	① Receive the E-5CH signal. ② Select BALANCE in the Menu of sound adjustment. ③ Using the UP/DOWN keys, make sure the left-to-right balance changes accordingly.	

电路性能的检查（图象和声音）

编号	调整点	调整方法及其条件	备注
1	对比度	① 接收E-5频道信号 ② 选择菜单中的CONTRAST(对比度)项目 ③ 触按UP(上移)/DOWN(下移)键,检查荧屏上的对比度是否发生与其相应的变化。	
2	彩色	① 接收J-13频道信号。 ② 选择菜单中的COLOUR(彩色)项目。 ③ 触按UP(上移)/DOWN(下移)键,检查荧屏上的彩色是否发生与其相应的变化。(该键处于最小位置时,荧屏上的彩色应为黑白)	
3	亮度	① 接收E-5频道信号。 ② 选择菜单中的BRIGHT(亮度)项目。 ③ 触按UP(上移)/DOWN(下移)键,检查荧屏上的黑色信号电平是否发生与其相应的变化。	
4	色调	① 接收J-13频道信号。 ② 选择菜单中的TINT(色调)项目。 ③ 触按UP(上移)键,检查荧屏上的色调是否呈现绿色。触按DOWN(下移)键,检查荧屏上的色调是否呈现红色。	关于这项目,重新检查副荧屏。
5	标准图象	① 在图象和声音制式调整状态下触按标准键,检查表示内容是否以标准状态出现在荧屏上。	
6	鲜明度	① 接收E-5频道信号。 ② 选择菜单中的SHARPNESS(鲜明度)项目。 ③ 触按UP(上移)/DOWN(下移)键,检查荧屏上的鲜明度是否发生与其相应的变化。	
7	频道代号表示色	① 检查所有频道(0～99)代号的表示色是否呈现绿色。(AFT ON之状态时)	
8	高音	① 接收E-5频道信号。 ② 在声音制式调整状态下，选择菜单中的TREBLE(高音)项目。 ③ 触按UP(上移)/DOWN(下移)键,检查荧屏上的高音表示是否发生与其相应的变化。	
9	低音	① 接收E-5频道信号。此时，必须将超低音控制键置于OFF位置。 ② 在声音制式调整状态下，选择菜单中的BASS(低音)项目。 ③ 触按UP(上移)/DOWN(下移)键,检查荧屏上的低音表示是否发生与其相应的变化。	

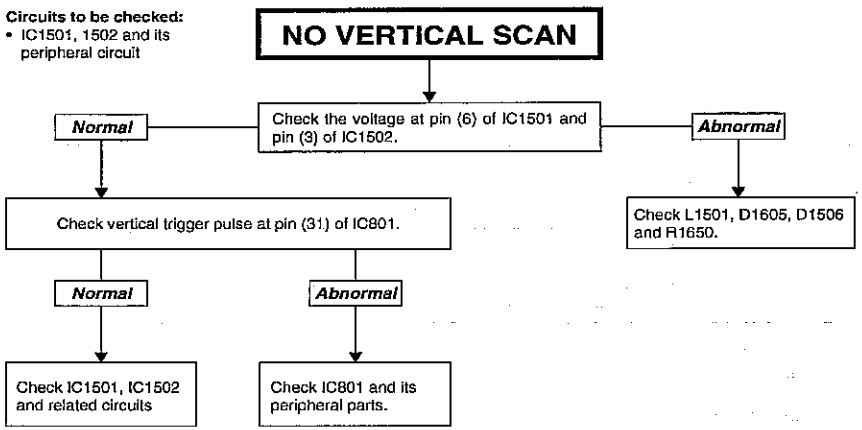
NO.	CHECK POINT	PROCEDUER AND CONDITIONS	NOTE, etc.
11	COLOUR SYSTEM	① Receive the E-12CH PAL colour bar signal. Select a colour system other than PAL. Make sure the colour system does not work. ② Receive the E-10CH SECAM colour bar signal. Select a colour system other than SECAM. Make sure the colour system does not work. ③ Receive the E-37CH NTSC4.43 colour bar signal. Select a colour system other than N4.43. Make sure the colour system does not work. ④ Receive the JA-8CH NTSC3.58 colour bar signal. Select a colour system other than N3.58. Make sure the colour system does not work.	
12	SOUND SYSTEM	① Receive the OI-9CH PAL (D/K) colour bar signal. Select the M, B/G and I sound systems to make sure the sound system does not work. ② Receive the E-23CH (I) monoscope pattern signal. Select the M, B/G and D/K sound systems to make sure the sound system does not work. ③ Receive the E-12CH (B/G) colour bar signal. Select the M, I and D/K sound systems to make sure the sound system does not work. ④ Receive the JA-8CH (M) colour bar signal. Select the B/G, I and D/K sound systems to make sure the sound system does not work.	
13	SPATIALIZER	① Receive the E-5CH music broadcast signal. ② Using the Menu screen, make sure the sound modes change as follows. ③ In the mono mode, listen to the sound from the speakers and make sure it feel wide.	SPATIALIZER OFF ↓ SPATIALIZER 1 ↓ SPATIALIZER 2
14	P IN P (P I P key MOVE Key SWAP Key FREEZE Key TV/VIDEO Key CH UP/DOWNKey)	① With the PIP, MOVE, SWAP,FREEZE, and TV/VIDEO keys, make sure the following functions are performed as specified: PIP on/off, size switching, four-corner movement, master/sub-screen inversion, still picture, TV/Video switching.Addition: Make also sure that the sub-screen channel changeswith the CH UP/DOWN key.	

编号	调整点	调整方法及其条件	备注
10	平衡	① 接收E-5频道信号。 ② 在声音制式调整状态下，选择菜单中的BALANCE(平衡)项目。 ③ 触按UP(上移)/DOWN(下移)键,检查荧屏上的平衡状态是否发生与其相应的变化。	
11	彩色制式	① 接收E-12频道PAL制式彩条信号。选择非PAL制式。确认这时的彩色表示功能不应正常工作。 ② 接收E-10频道SECAM制式彩条信号。选择非SECAM制式。确认这时的彩色表示功能不应正常工作。 ③ 接收E-37频道NTSC4.43制式彩条信号。选择非NTSC4.43制式。确认这时的彩色表示功能不应正常工作。 ④ 接收JA-8频道NTSC3.58制式彩条信号。选择非NTSC3.58制式。确认这时的彩色表示功能不应正常工作。	
12	声音制式	① 接收OI-9频道(D/K)制式彩条信号。选择M，B/G及I声音制式。确认这时的声音不应正常地发出。 ② 接收E-23频道(I)单象管图案信号。选择M，B/G及D/K声音制式。确认这时的声音不应正常地发出。 ③ 接收E-12频道(B/G)彩条信号。选择M，I及D/K声音制式。确认这时的声音不应正常地发出。 ④ 接收JA-8(M)彩色信号。选择B/G、I及D/K声音制式。确认这时的声音不应正常地发出。	
13	SPATIALIZER (超立体声控制键)	① 接收E-5频道电视台音乐节目信号。 ② 通过菜单显示屏，检查声音制式是否发生如右变化。 ③ 在黑白状态下,检查从扬声器中出来的声音有无如亲临现场的感觉。	SPATIALIZER 关 ↓ SPATIALIZER 1 ↓ SPATIALIZER 2
14	双图象 PIP控制键 MOVE控制键 SWAP控制键 FREEZE控制键 TV/VIDEO控制键 CH UP/DOWN控制键	① 用PIP、MOVE、SWAP、FREEZE及TV/VIDEO键来检查下列所示功能是否符合规定要求:PIP打开/关闭,画面尺寸切换,四角移动,主/副荧屏反转、静止画面、TV/VIDEO切换。 另外,触按CH UP/DOWN控制键以检查副荧屏上的频道代号是否发生与其相应的变化。	

TROUBLE SHOOTING TABLE

Trouble for Sub Pinture (PIP).
See related trouble shooting, and convert to equivalent parts as followings.
TU201→TU101
IC201→IC101
L200 →L105
Q201 →Q101 etc.

Circuits to be checked:
- IC1501, 1502 and its peripheral circuit

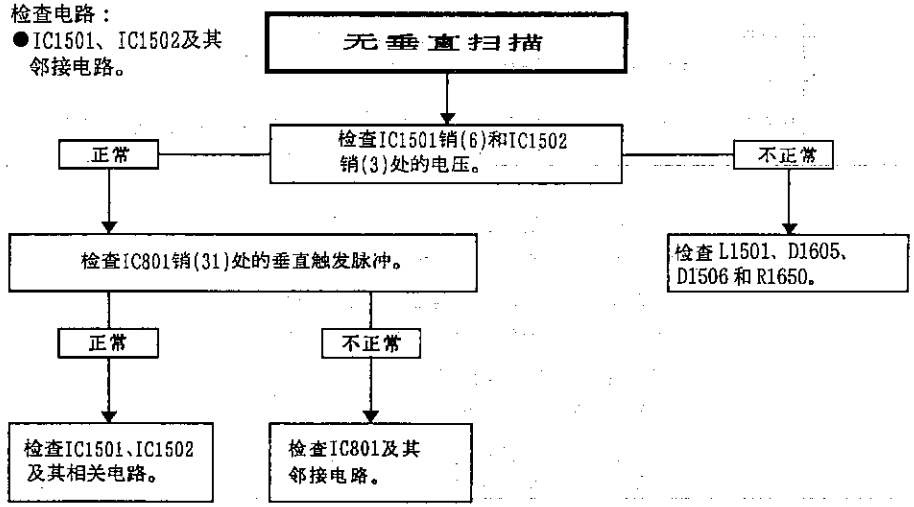


Note1: Make sure that not for the horizontal centering mode. Turn on the service mode. (Short TP1001 and TP1002.) Then when you press "- / --" key on the remote you can get in the horizontal centering mode.
Note2: The vertical sync signal must be fed to pin (62) of IC1001 in oder not to activate the vertical no-scan protector. Take this measure with the protector circuit for the troubleshooting on the following pages.

故障检修流程图

副荧屏(PIP)的故障
参见与其有关的故障检修流程图,然后以与下列所示相同条件的部件编号代替而同样进行故障检修。
TU201→TU101
IC201→IC101
L200→L105
Q201→Q101等等

检查电路：
●IC1501、IC1502及其邻接电路。

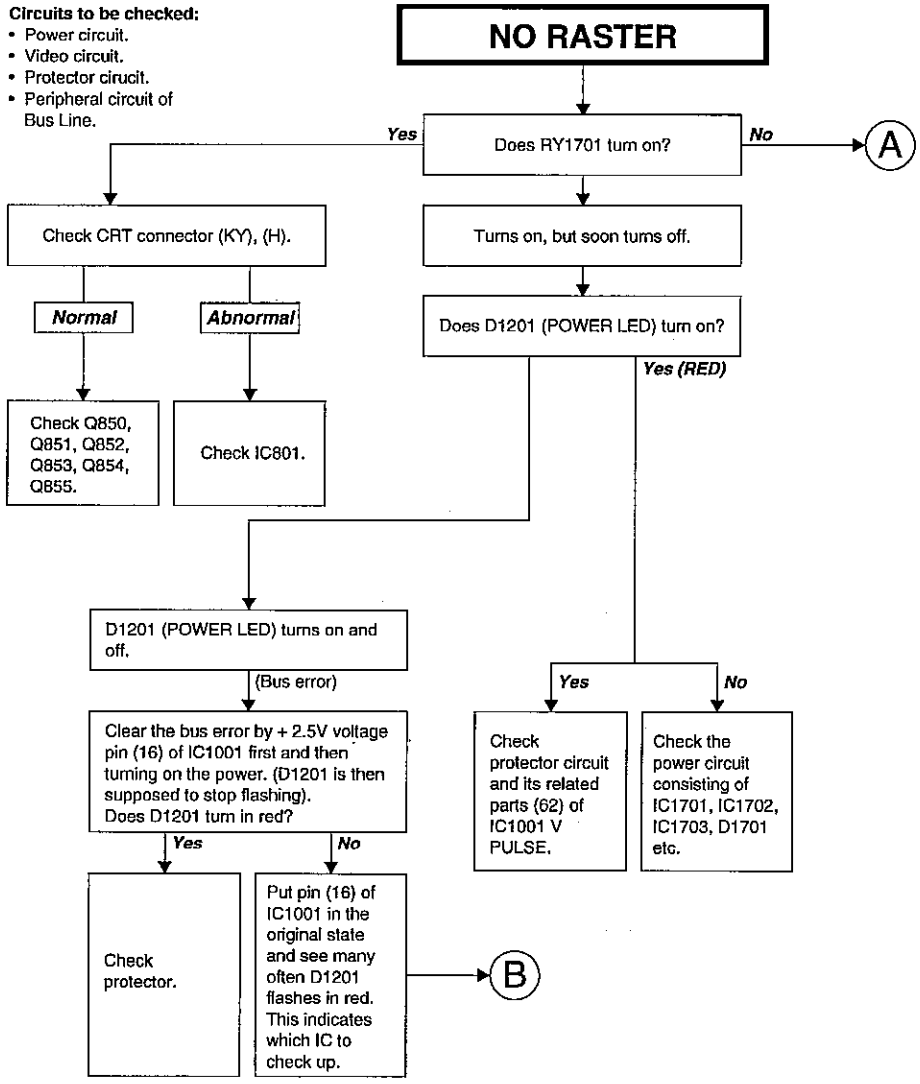


注1:先确认荧屏不设定于水平中心状态,然后再设定于保养调整状态。(短接TP1001和TP1002)。触按遥控器上的"--"键时,荧屏即可进入水平中心状态。
注2:为防止发生垂直扫描线,必须输入垂直同步信号于IC1001的销(62),否则保护器便会开动。
关于下页以后所述的保护电路,必须按上记要领进行之。

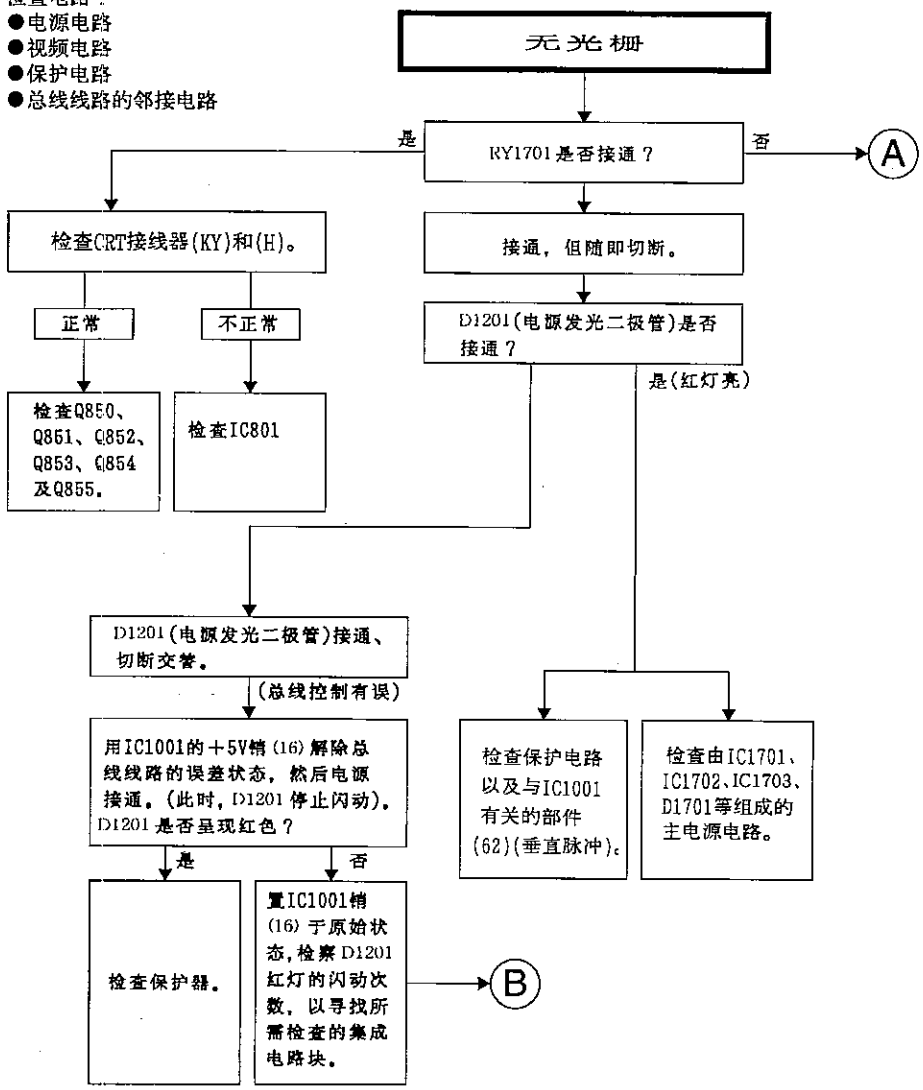
TROUBLE SHOOTING TABLE (Continued)

故障检修流程图 （接上页）

Circuits to be checked:
- Power circuit.
- Video circuit.
- Protector circuit.
- Peripheral circuit of Bus Line.

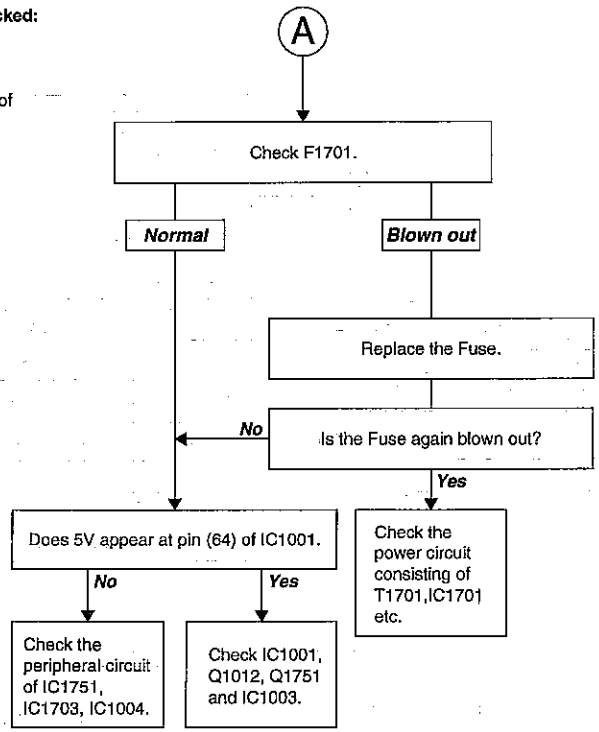


检查电路：
- ●电源电路
- ●视频电路
- ●保护电路
- ●总线线路的邻接电路



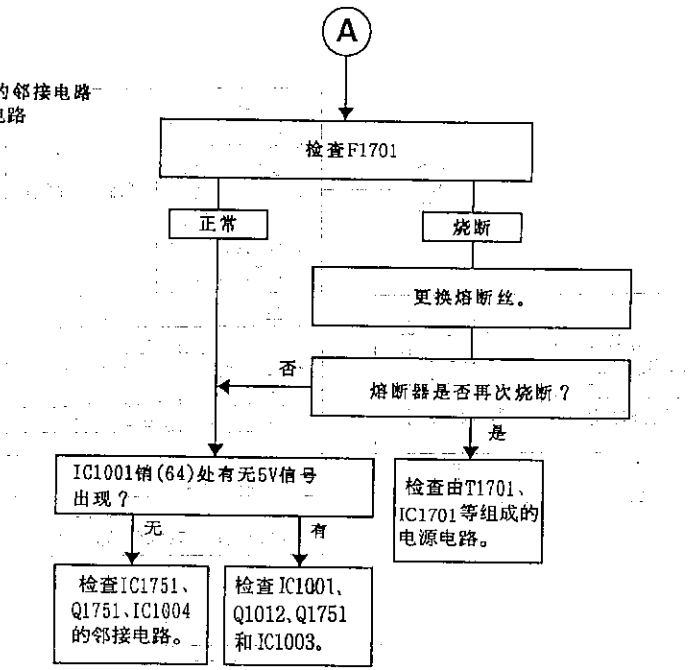
TROUBLE SHOOTING TABLE (Continued)

Circuits to be checked:
- Power circuit.
- Micon circuit.
- Protector circuit
- Peripheral circuit of Bus Line.

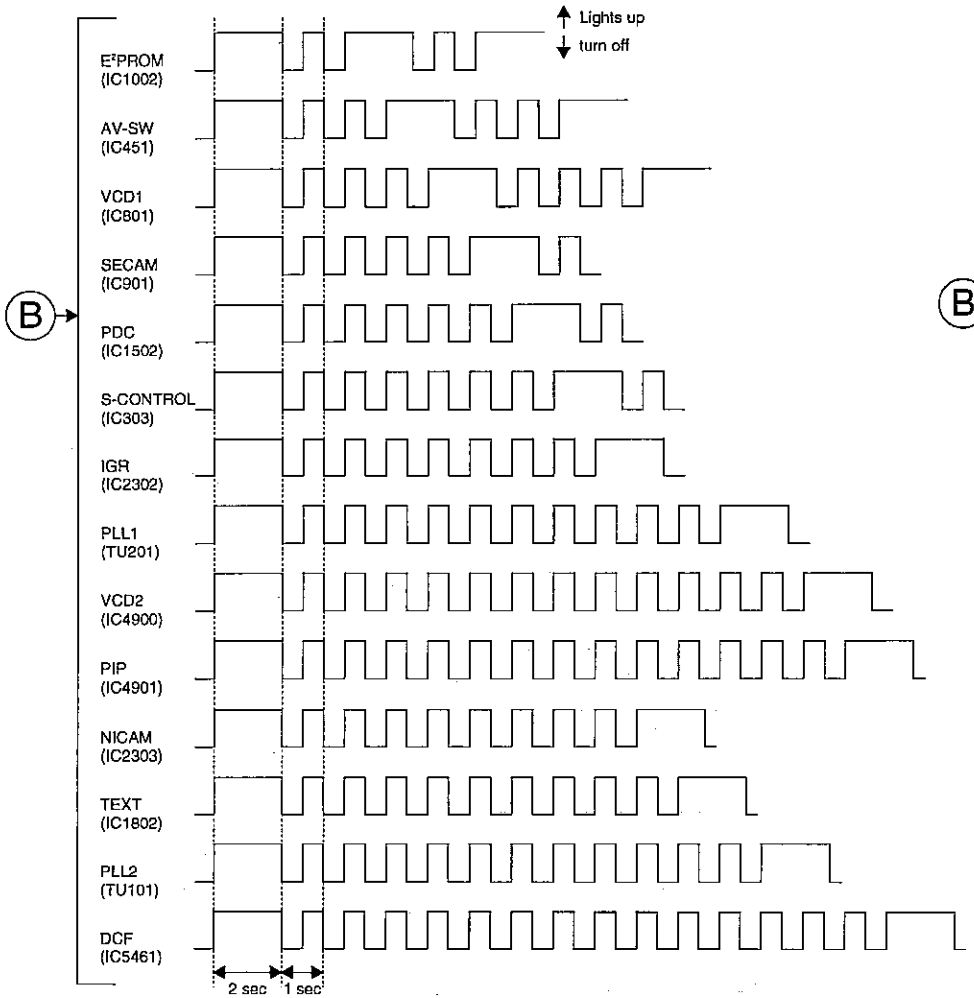


故障检修流程图 （接上页）

检查电路：
- ●电源电路
- ●保护电路
- ●总线线路的邻接电路
- ●微型电脑电路



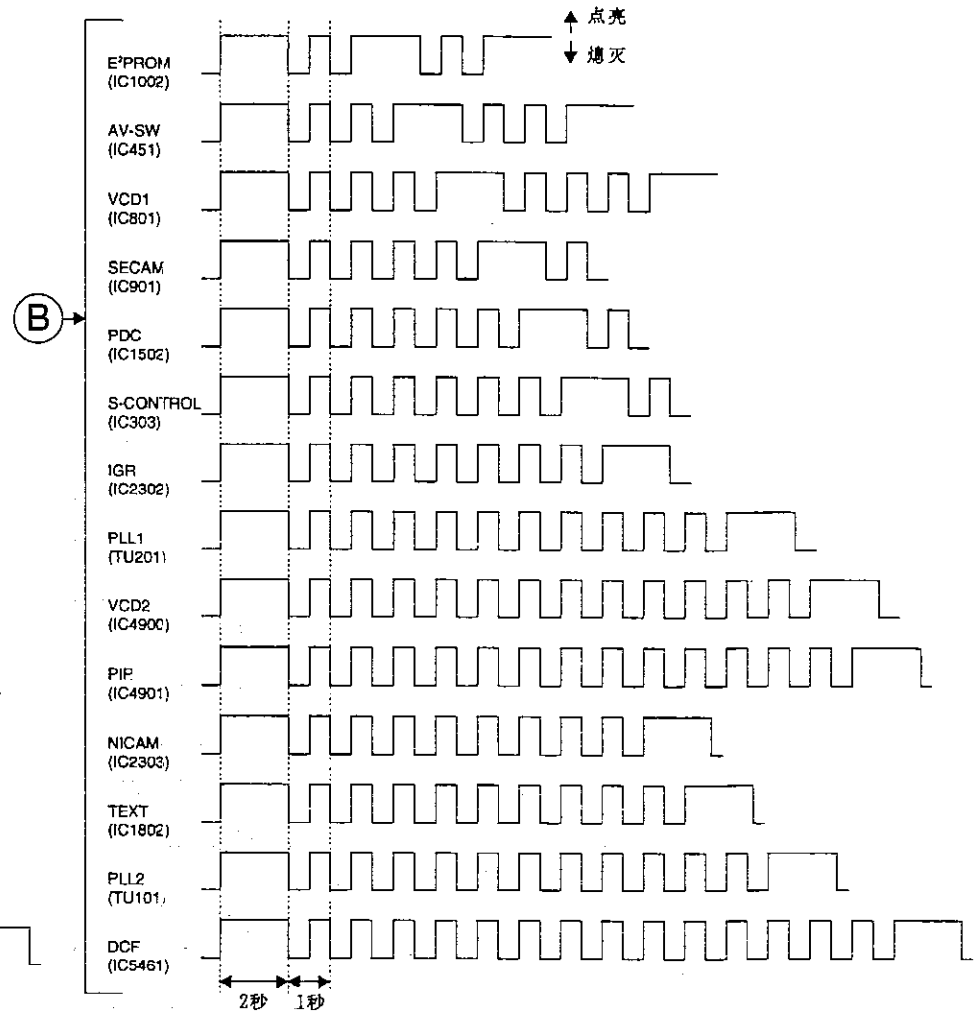
TROUBLE SHOOTING TABLE (Continued)



Other pattern: Other I²C bus control ic or unit.
(It has SDA and SCL PORT.)

E29

故障检修流程图（接上页）

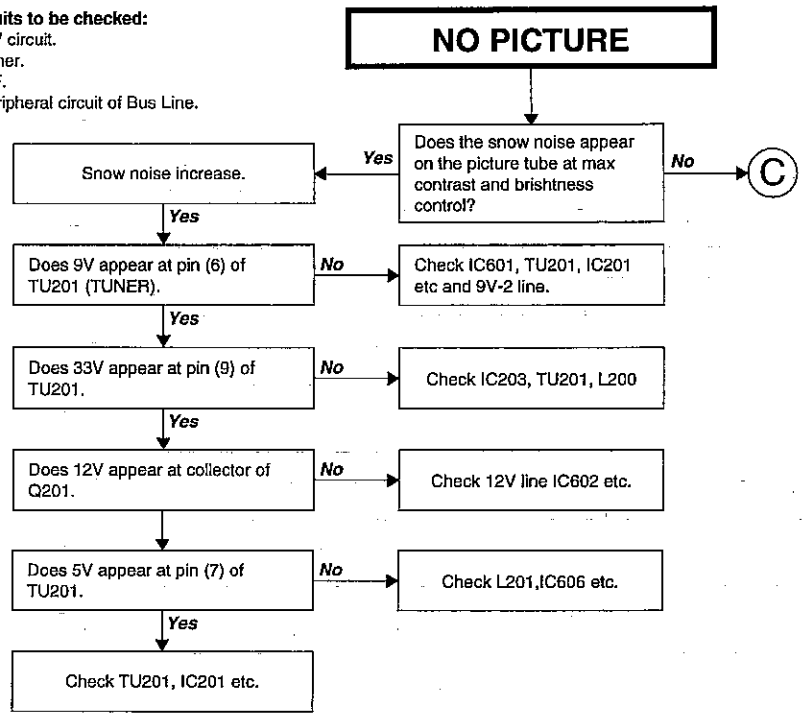


其它图案：其它I^2C总线控制用集成电路块或装置。
（具有SDA和SCL通道）

C29

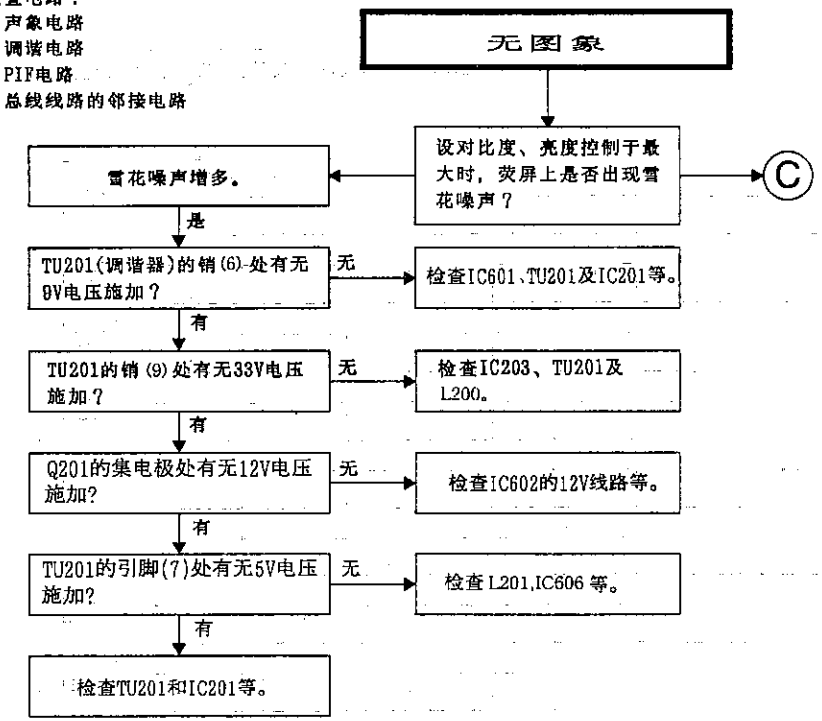
TROUBLE SHOOTING TABLE (Continued)

Circuits to be checked:
- A/V circuit.
- Tuner.
- PIF.
- Peripheral circuit of Bus Line.



故障检修流程图（接上页）

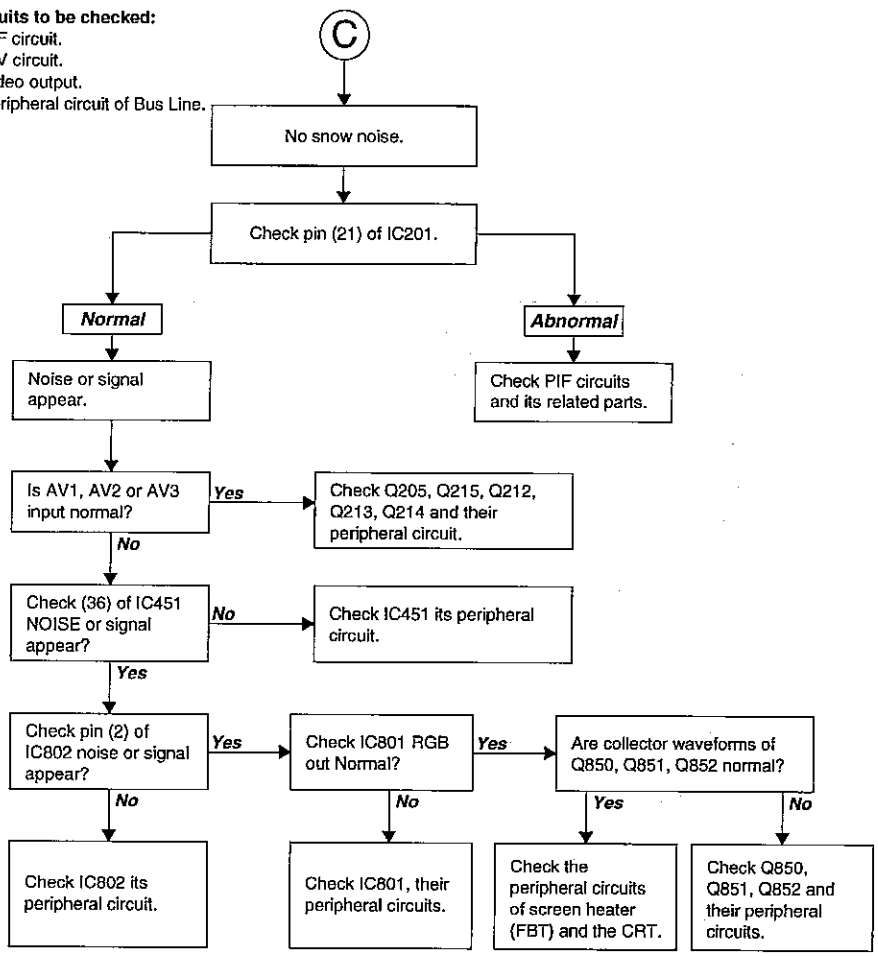
检查电路：
- ●声象电路
- ●调谐电路
- ●PIF电路
- ●总线线路的邻接电路



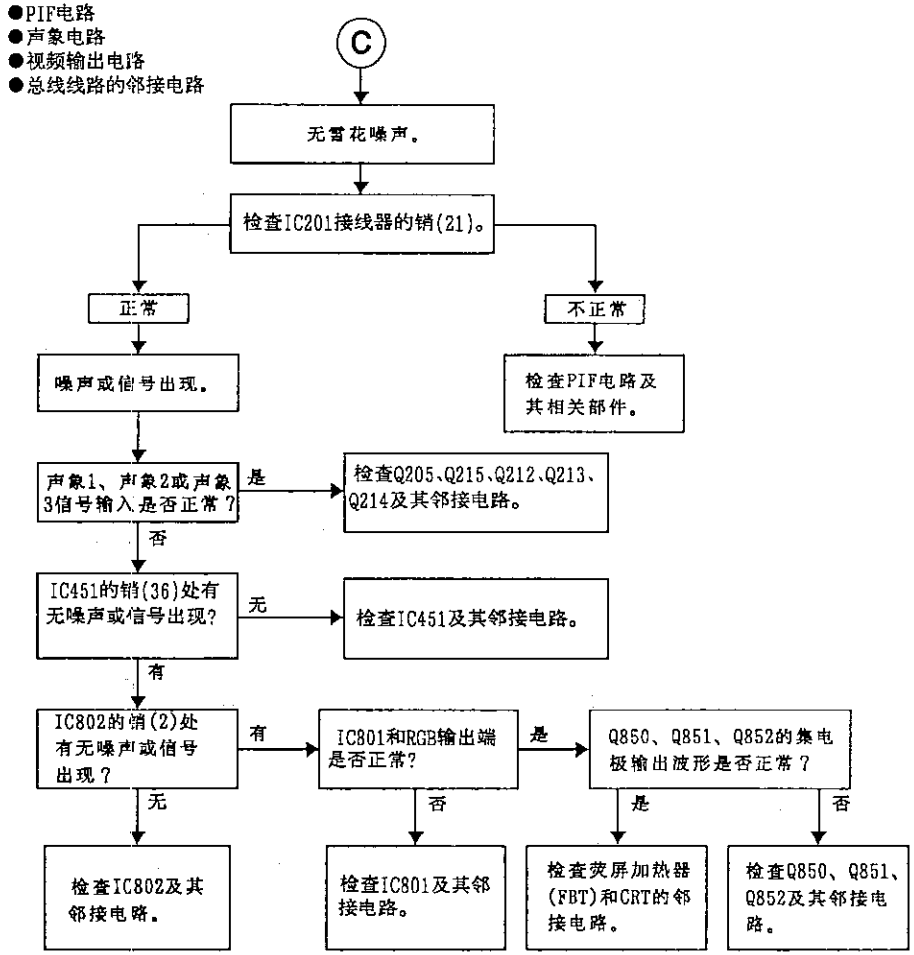
TROUBLE SHOOTING TABLE (Continued)

故障检修流程图 （接上页）

Circuits to be checked:
- PIF circuit.
- A/V circuit.
- Video output.
- Peripheral circuit of Bus Line.



检查电路：
- ●PIF电路
- ●声象电路
- ●视频输出电路
- ●总线线路的邻接电路

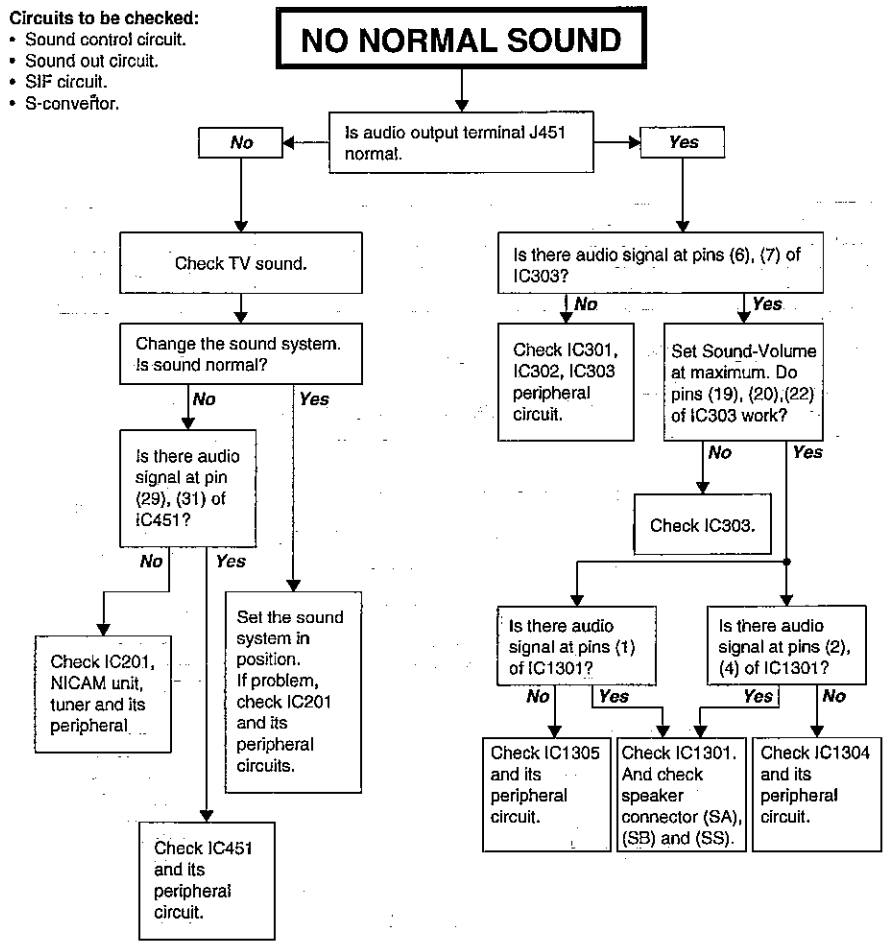


E31

C31

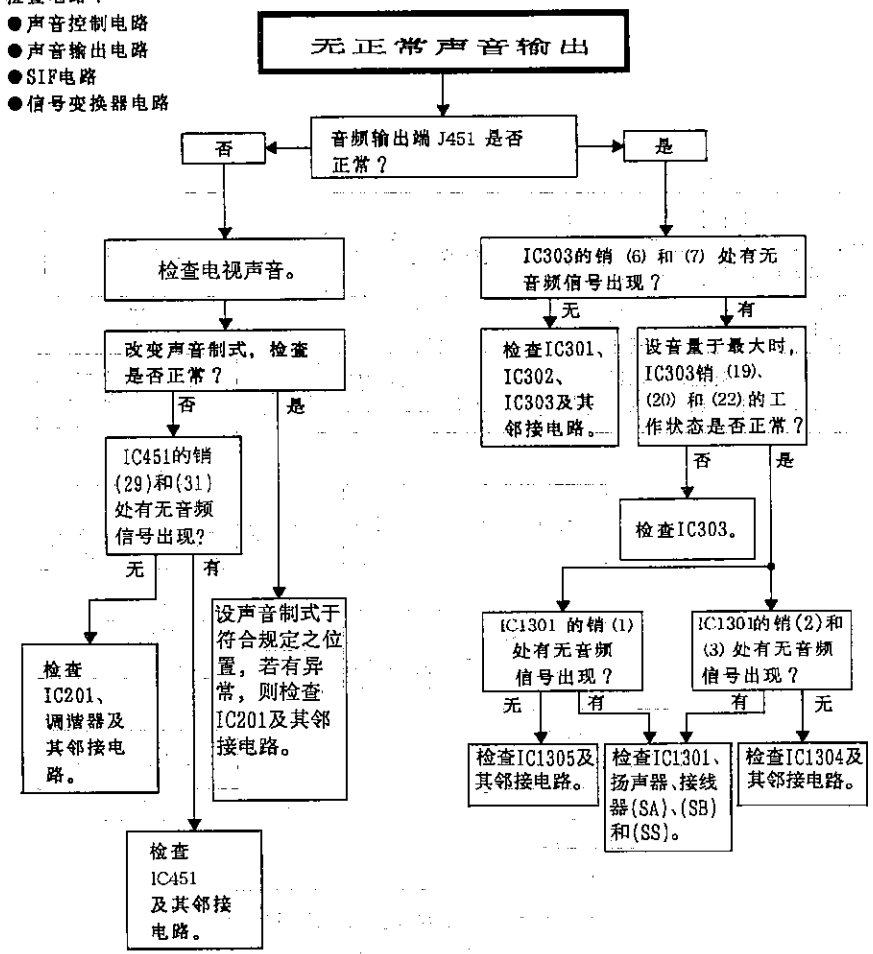
TROUBLE SHOOTING TABLE (Continued)

Circuits to be checked:
- Sound control circuit.
- Sound out circuit.
- SIF circuit.
- S-convertor.

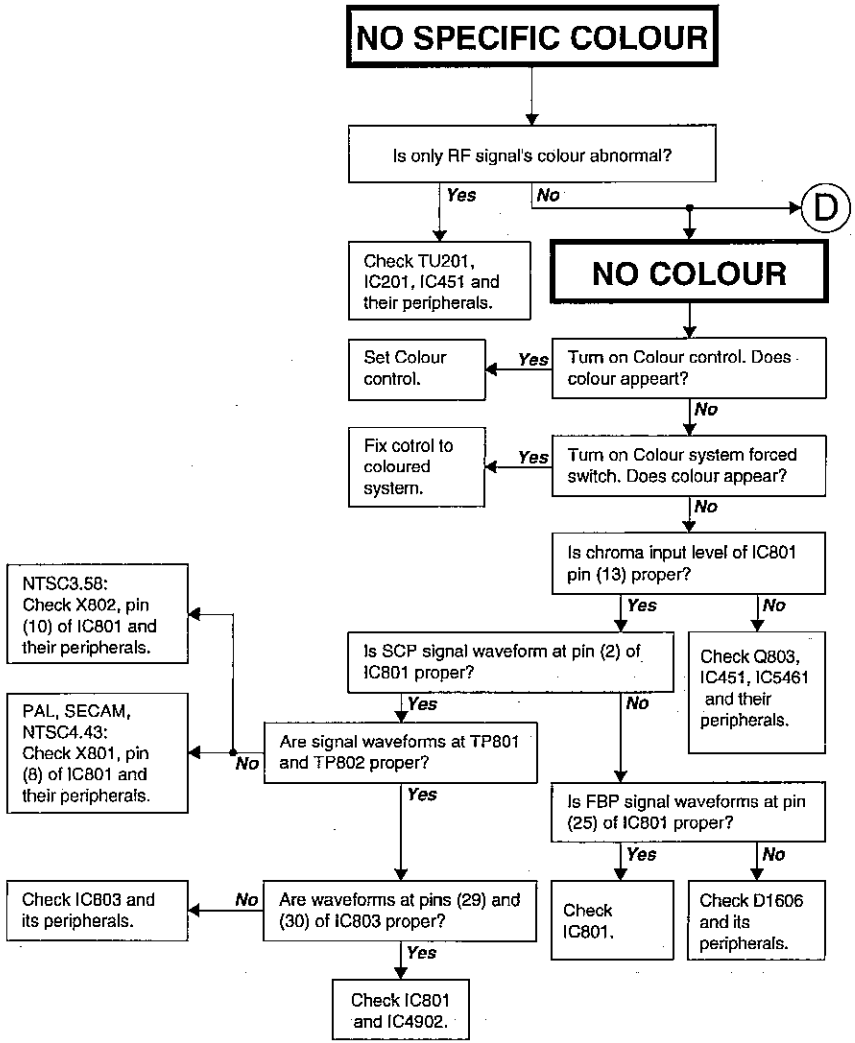


故障检修流程图 （接上页）

检查电路：
- ●声音控制电路
- ●声音输出电路
- ●SIF电路
- ●信号变换器电路

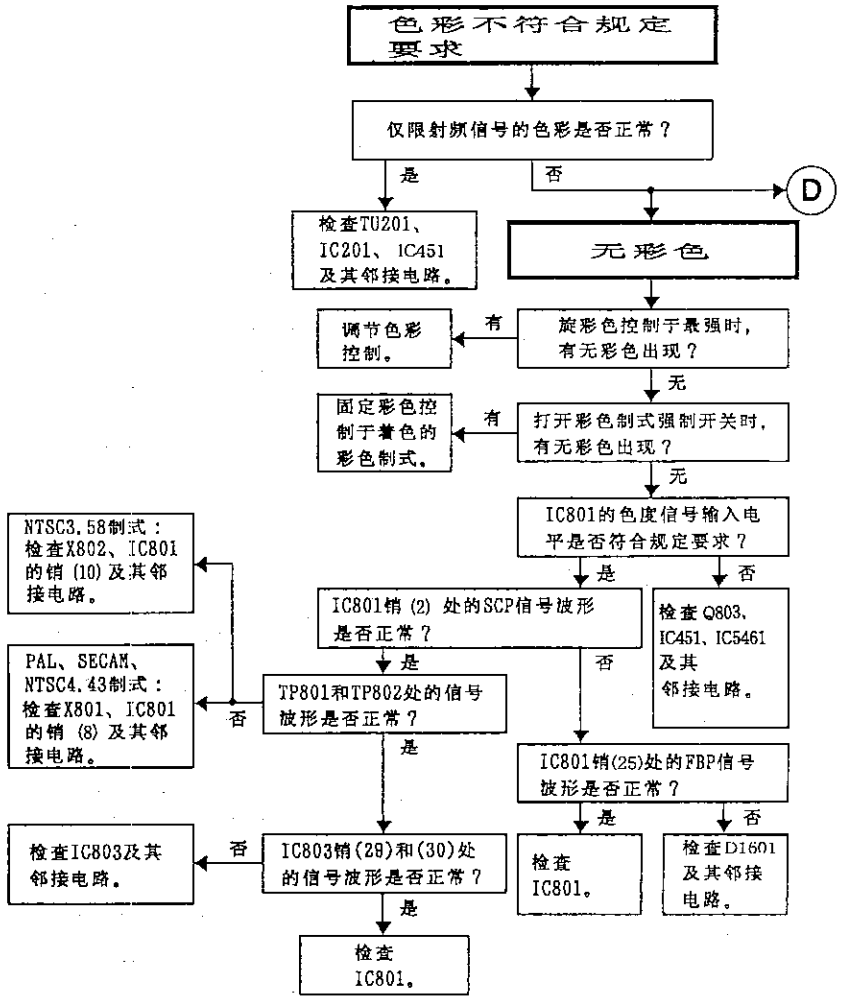


TROUBLE SHOOTING TABLE (Continued)



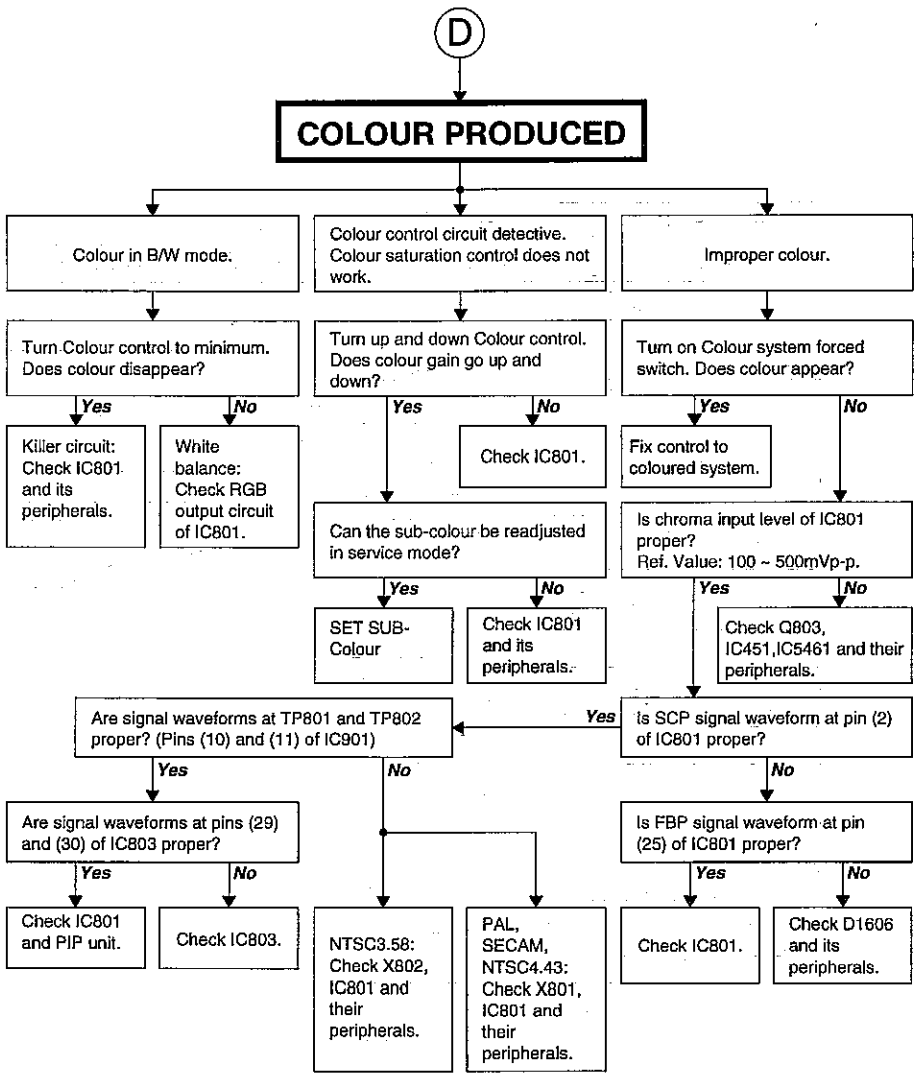
E33

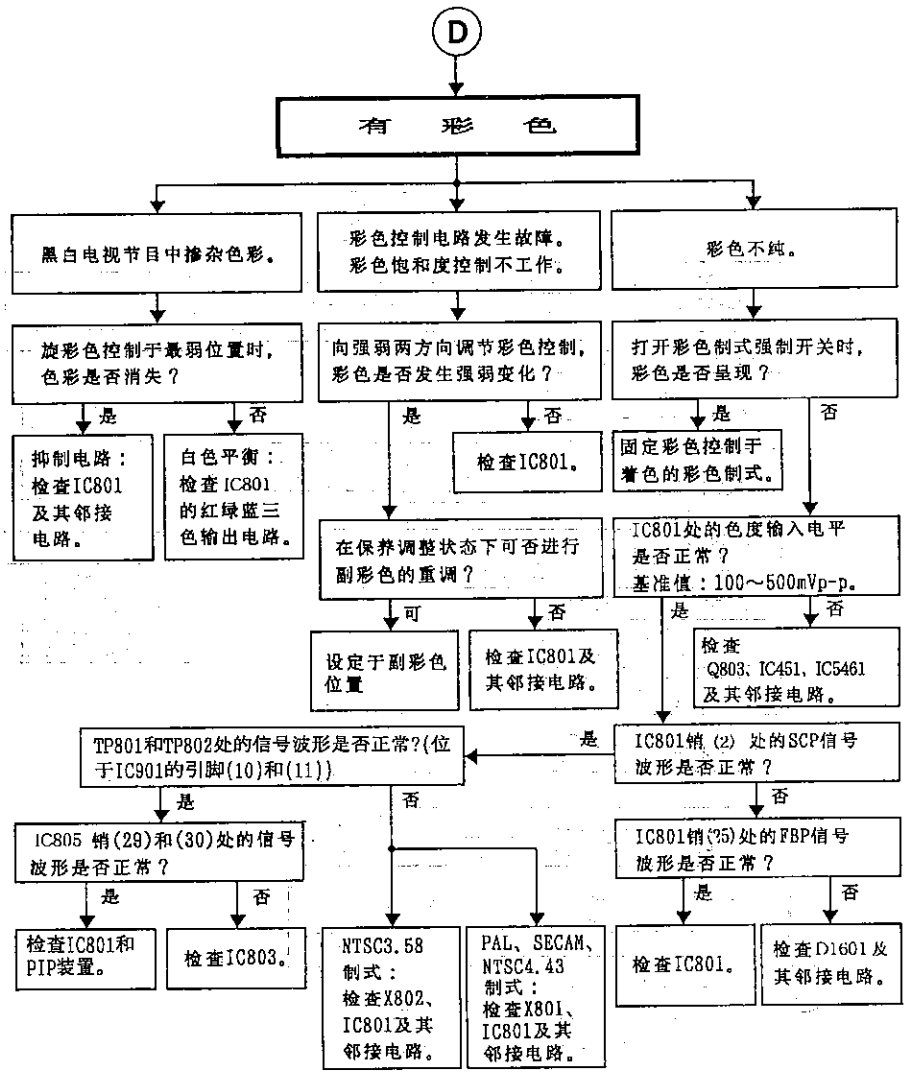
故障检修流程图 （接上页）



C33

TROUBLE SHOOTING TABLE (Continued)



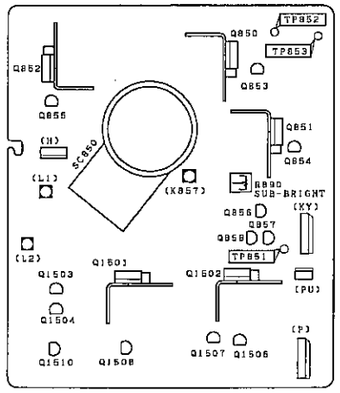


33RX20J	33RX20J

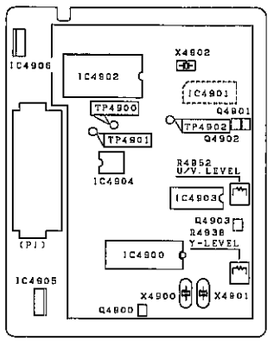
CHASSIS LAYOUT
机芯底盘电路布置

MODEL 33RX20J

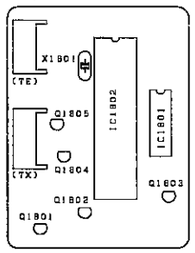
PWB-B



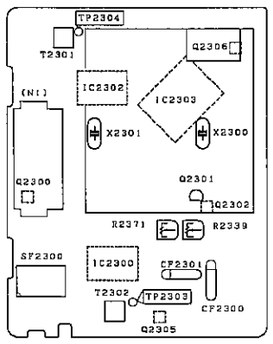
PWB-F



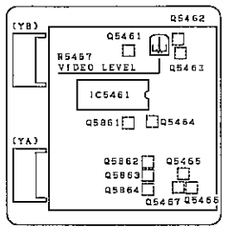
PWB-G



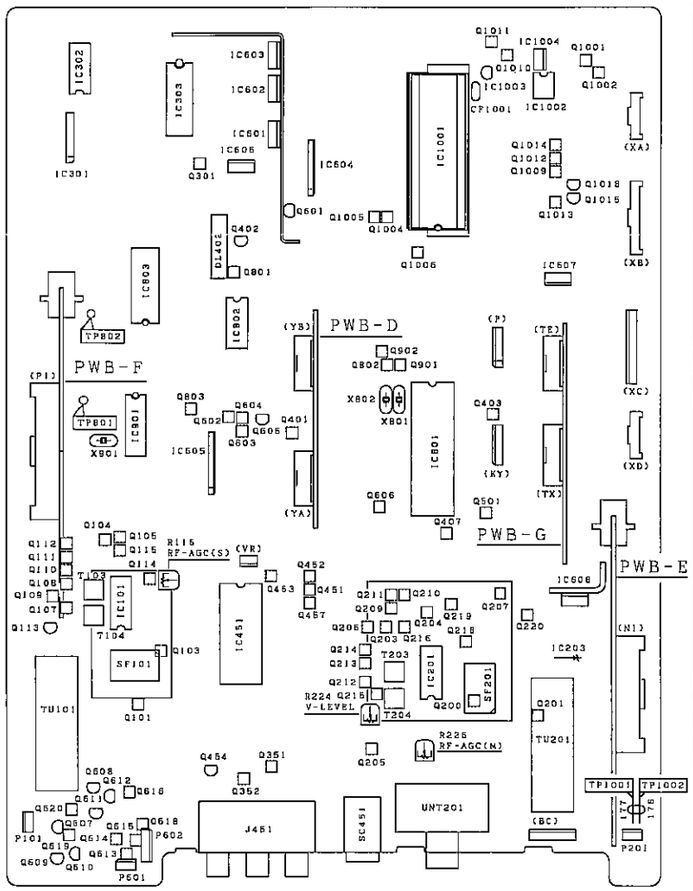
PWB-E

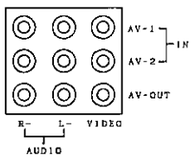


PWB-D

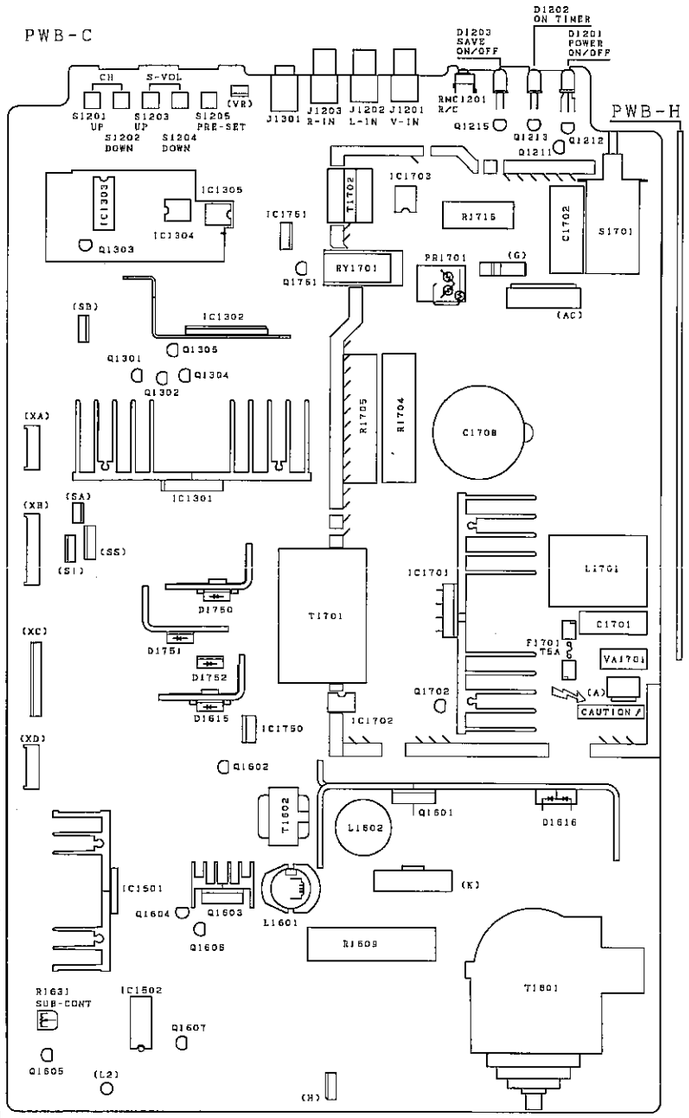


PWB-A

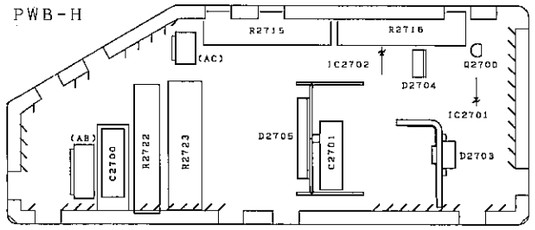




PWB-C

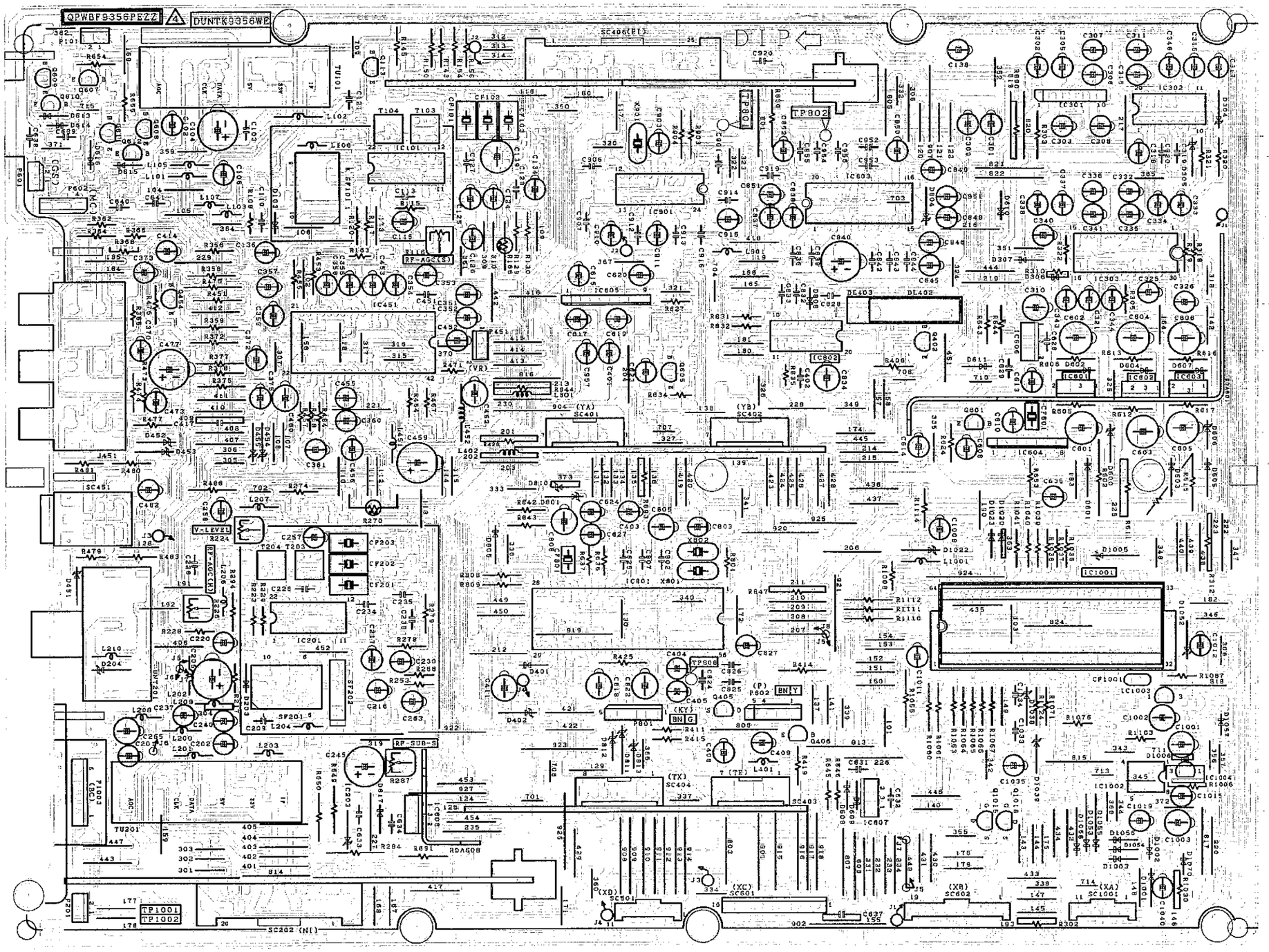


PWB-H



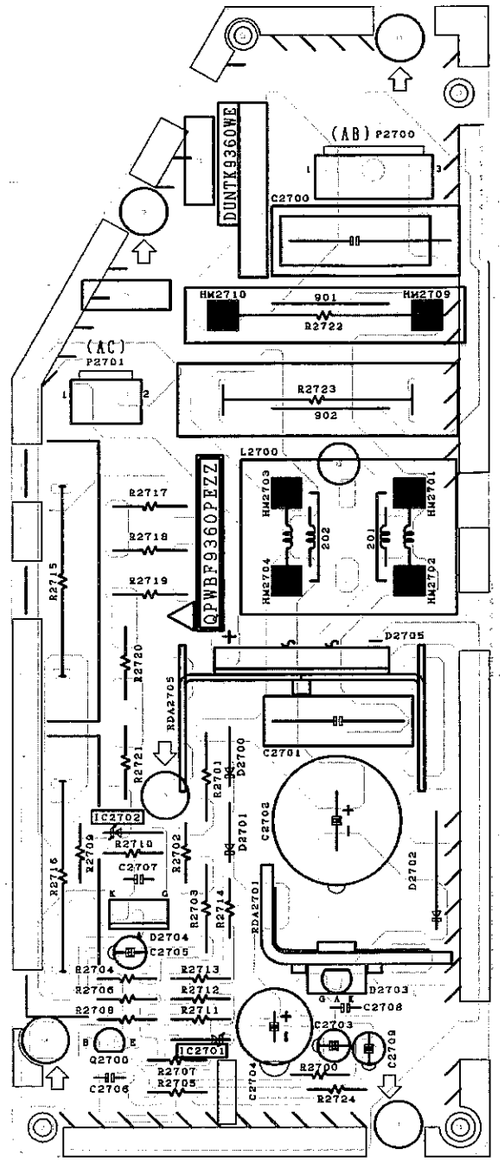
PRINTED WIRING BOARD ASSEMBLIES

印刷电路板的组装件



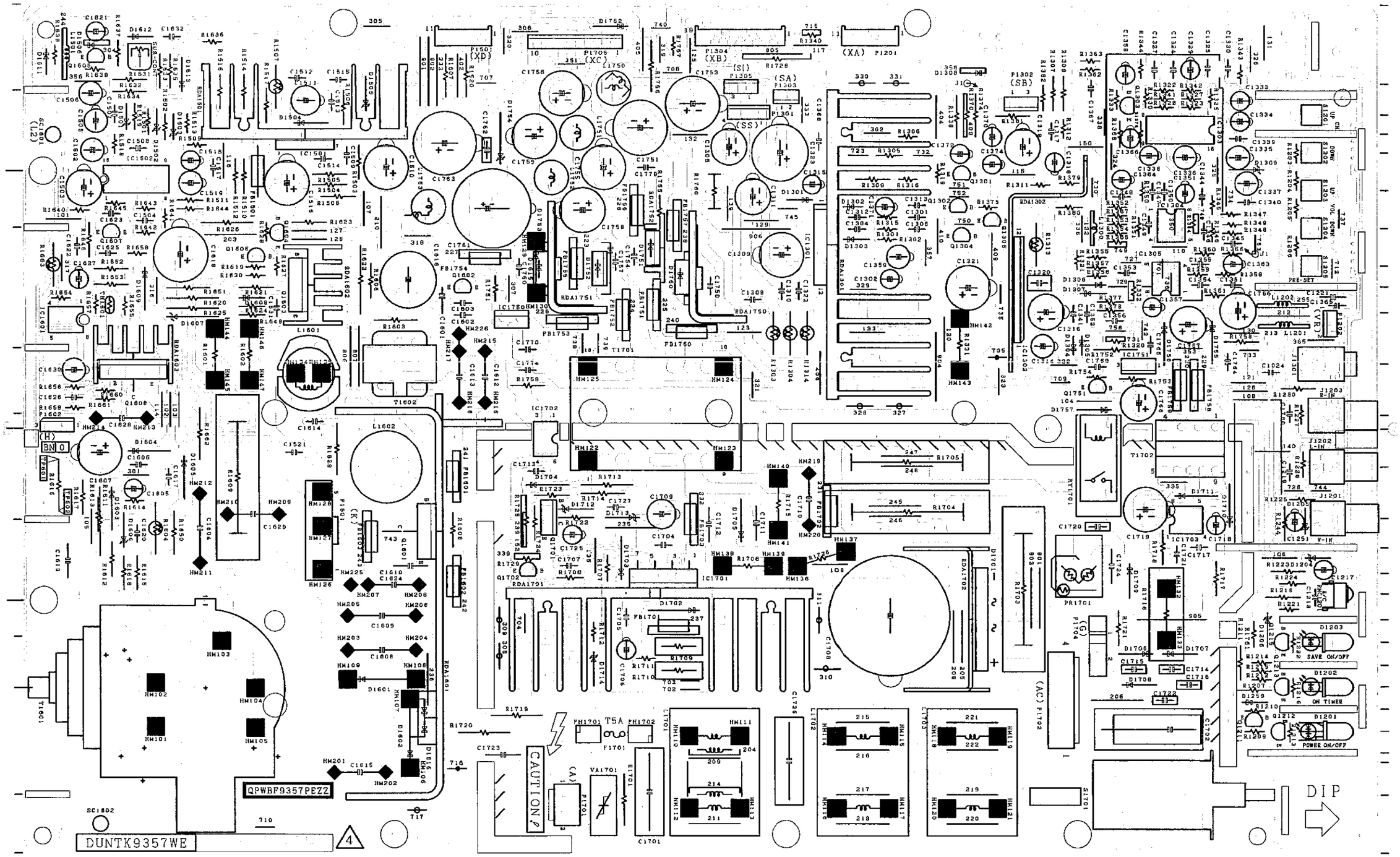
PWB-A:Main Unit (Wiring Side)

主电路装置（线路贴置侧）



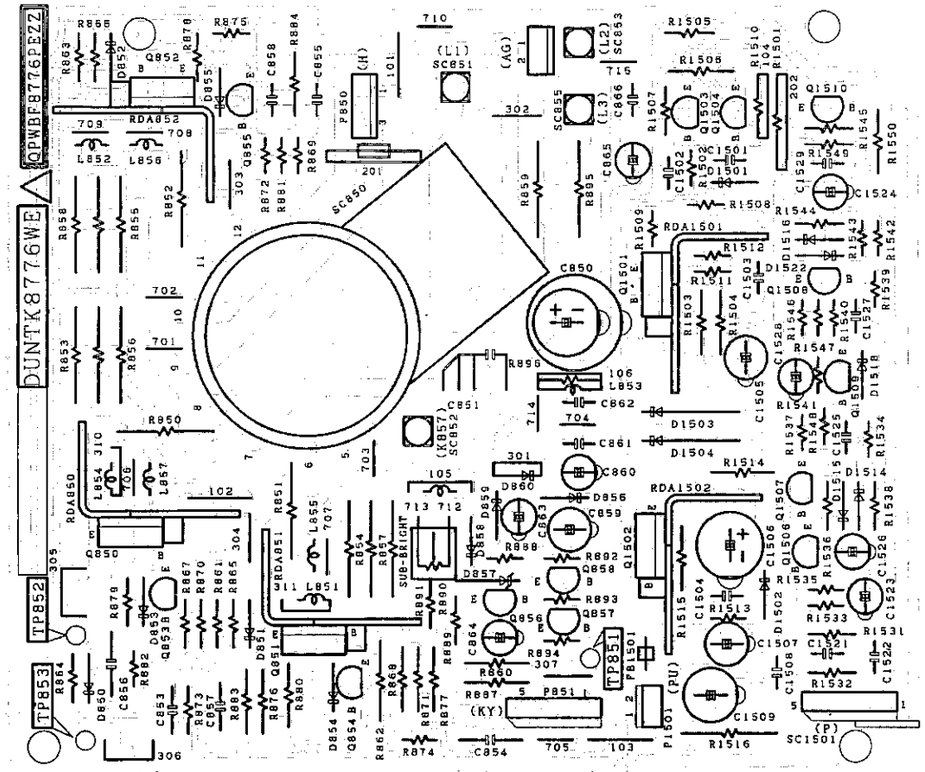
PWB-H:SUB POWER Unit (Wiring Side)

辅助电源装置（线路贴置侧）

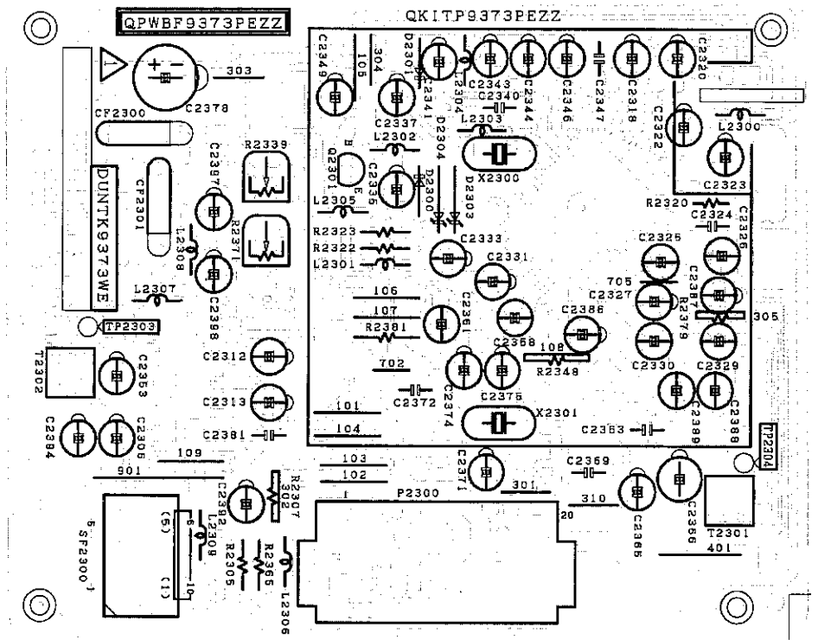


PWB-C:Power Unit (Wiring Side)

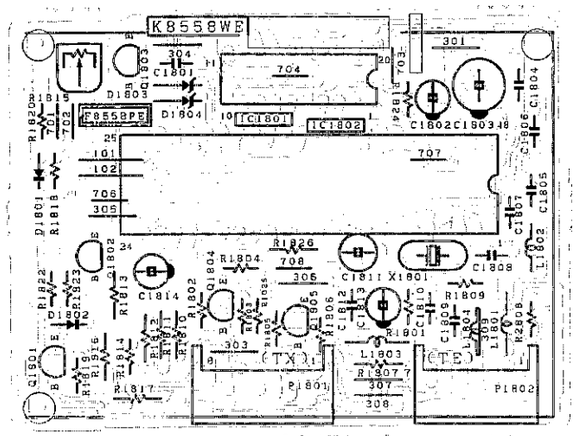
电源电路装置（线路贴置侧）



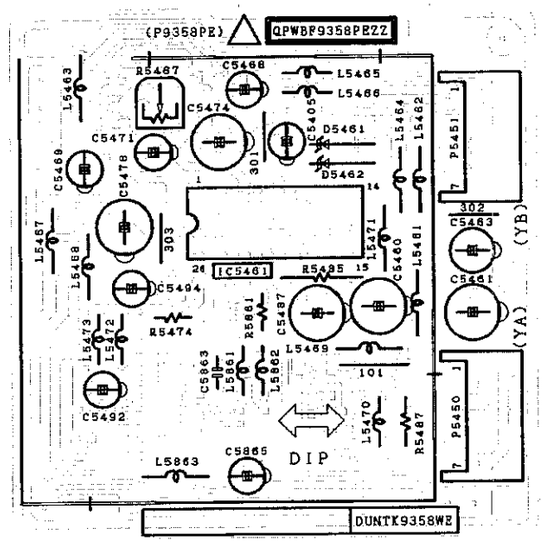
PWB-B: CRT Socket Unit (Wiring Side)
CRT管座电路装置（线路贴置侧）



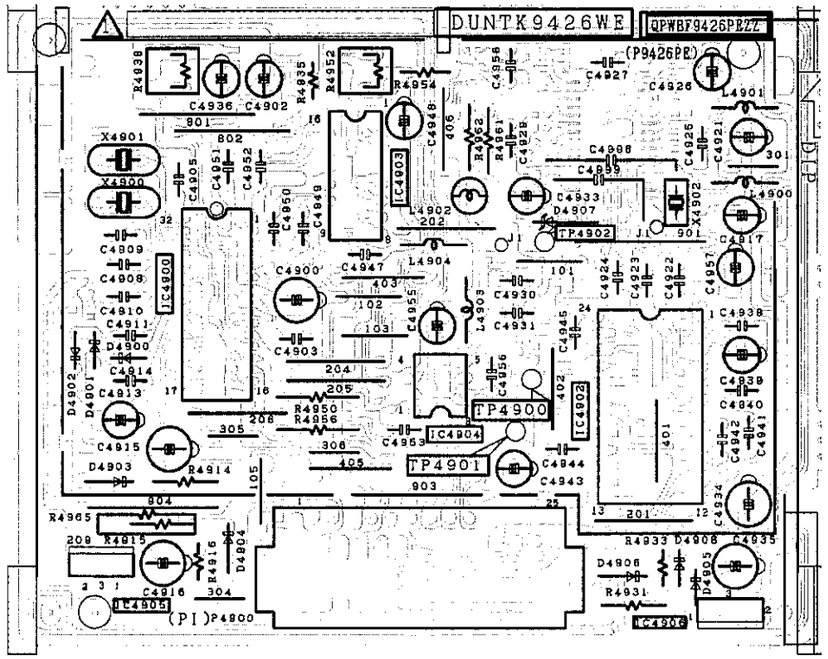
PWB-E:NICAM Unit (Wiring Side)
NICAM制式电路装置(线路贴置侧)



PWB-G:TEXT Unit (Wiring Side)
文字表示电路装置(线路贴置侧)



PWB-D:DIG. Unit (Wiring Side)
数字式梳形滤波电路装置（线路贴置侧）



PWB-F:P in P Unit (Wiring Side)
双图象电视电路装置（线路贴置侧）

DESCRIPTION OF SCHEMATIC DIAGRAM

CAUTION: This circuit diagram is original one, therefore there may be a slight difference from yours.

SAFETY NOTES:

1. *DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.*
2. *SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.*

IMPORTANT SAFETY NOTICE:

PARTS MARKED WITH "⚠" (▒▒▒) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

SERVICE PRECAUTION:

THE AREA ENCLOSED BY THIS LINE (—— -- ——) IS DIRECTLY CONNECTED WITH AC MAINS VOLTAGE.
WHEN SERVICING THE AREA, CONNECT AN ISOLATING TRANSFORMER BETWEEN TV RECEIVER AND AC LINE TO ELIMINATE HAZARD OF ELECTRIC SHOCK.

NOTES:

1. *The unit of resistance "ohm" is omitted. (K = 1000 ohms, M = Meg ohm).*
2. *All resistors are 1/8 watt, unless otherwise noted.*
3. *All capacitors are μF, unless therwise noted. (P = μμF).*
4. *The diodes, whose parts code is not described, are the 1SS119.*

VOLTAGE MEASUREMENT CONDITIONS:

1. *The voltage without parenthesis represents the value measured with PAL colour signal.*
2. *The voltage in parenthesis represents the value measured with no signal.*
3. *All the voltages were measured by using a high impedance voltmeter.*

WAVEFORM MEASUREMENT CONDITIONS:

1. *The colour bar signal applied to the TP202 is 2.0 Vp-p.*
2. *The tuner AGC voltage is approximately 4V.*

电路原理图的说明

注意：这里的电路原理图均为最初设计原图，与您的机器的电路原理可能有不同之处。

安全注意事项：

1. 更换电路元件时，必须先拔出电源插头，切断电源。
2. 机芯底盘电路处工作状态时，应注意电路中半导体元件散热片高电位可能导致的电击危险。

安全使用注意要点：

标有"⚠"（▒▒▒）的元件为对保证本机长久的安全使用起重要的元件。更换这些元件时，必须使用规定的纯正正牌元件，以保证本机的使用安全以及使用寿命。

维修注意事项：

电路中由点划线（——·——）所围部分为与交流电源直接相接线路。对这些部分的线路进行维修时，应于本机与交流电源之间用隔离变压器相接，以防止不意的电击之危险。

电路单位说明：

1. 电阻欧姆(Ω)单位予以略记（K=千欧姆，M=兆欧姆）。
2. 除特别说明者外，图中电阻功率均为1/8瓦特。
3. 除特别说明者（P=微微法拉）外，图中电容单位均为μF(微法拉）。
4. 除特别说明者外，图中二极管均为1SS119。

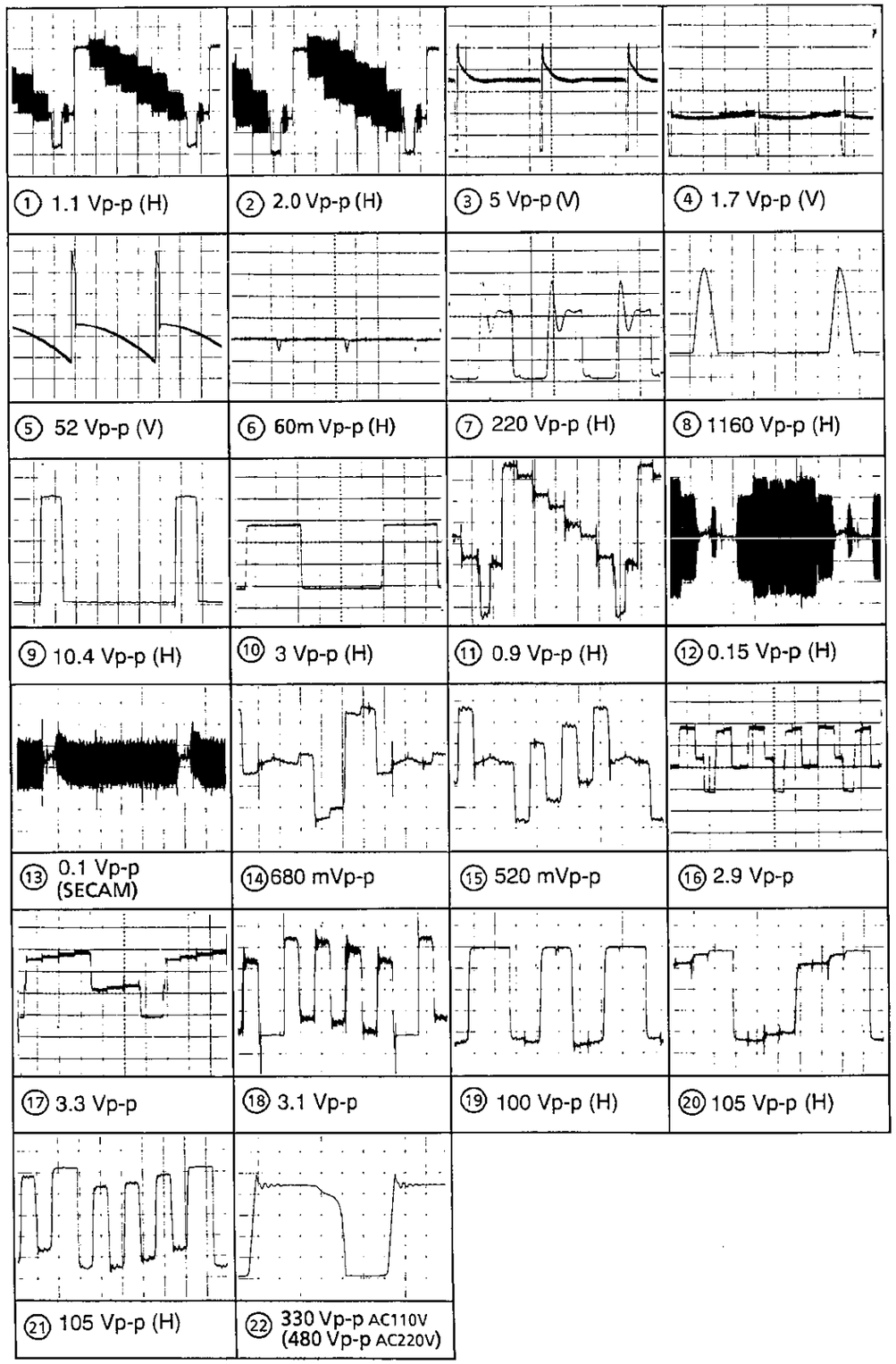
电压测定条件：

1. 括号外的电压值为PAL制式彩色信号状态下所测。
2. 括号中的电压值为无信号状态下所测。
3. 所有的电压值均由高阻抗电压计所测。

波形测定条件：

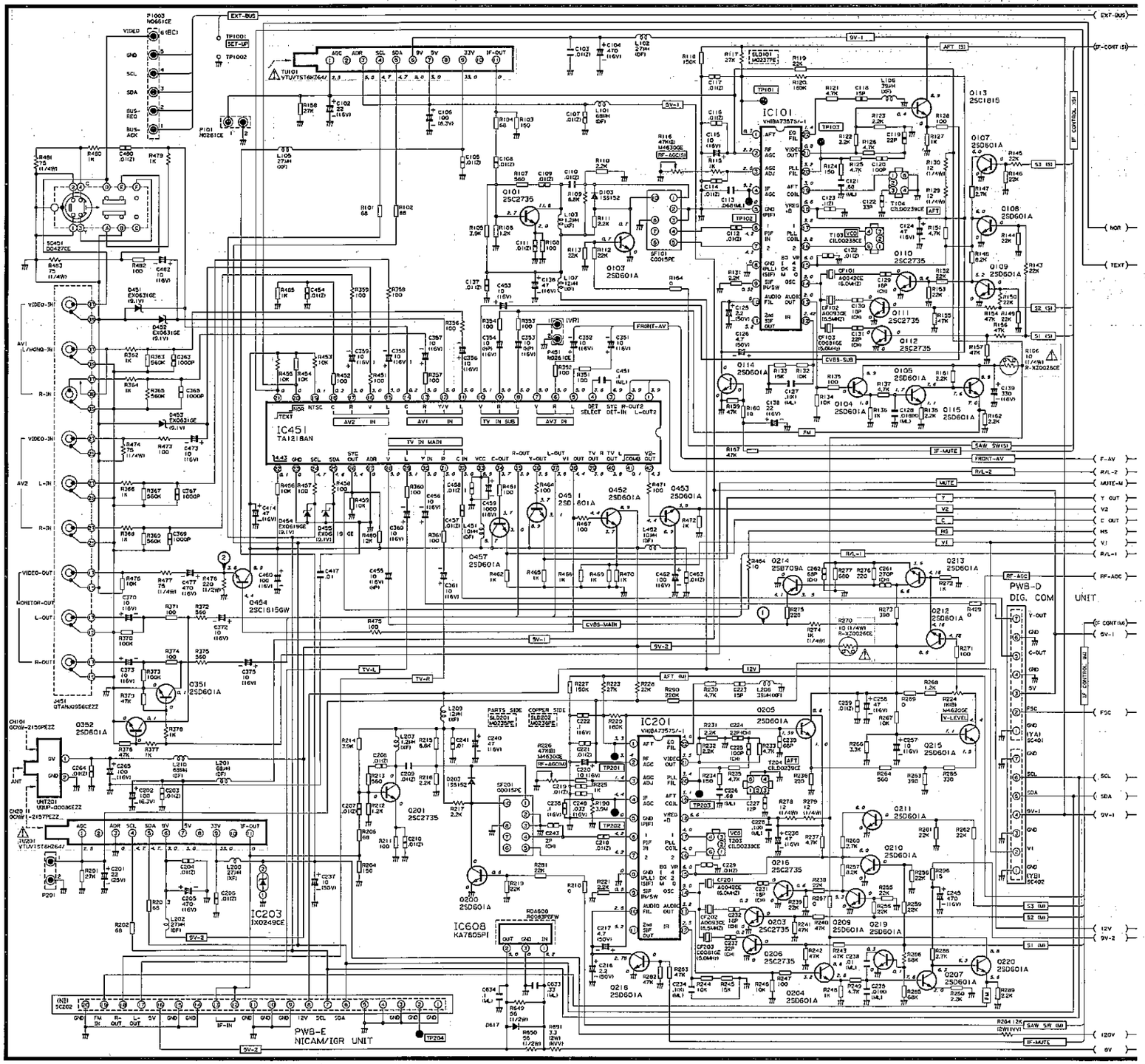
1. 施加于TP202的彩条信号应为2.0Vp-p。
2. 调谐器AGC（自动增益控制）电压约为4V。

WAVEFORMS
波形图



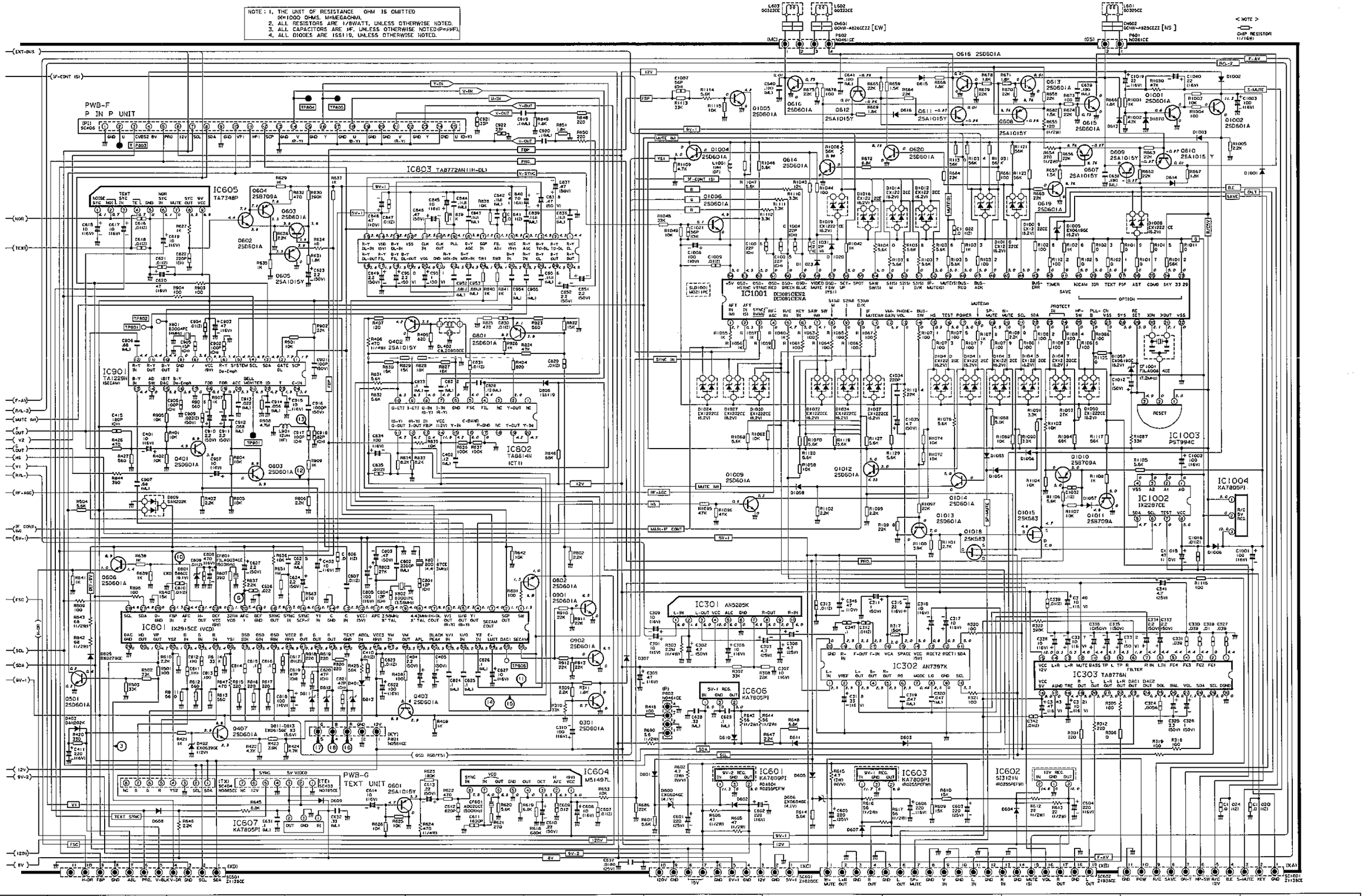
SCHEMATIC DIAGRAM ■ Main Unit 1/2
电路原理图 ■主电路装置－1/2

NOTE : 1. THE UNIT OF RESISTANCE OHM IS OMITTED.
(K=1000 OHMS, M=MEGAOHMS).
2. ALL RESISTORS ARE 1/8WATT, UNLESS OTHERWISE NOTED.
3. ALL CAPACITORS ARE μF, UNLESS OTHERWISE NOTED (P=μμF).
4. ALL DIODES ARE 1SS119, UNLESS OTHERWISE NOTED.



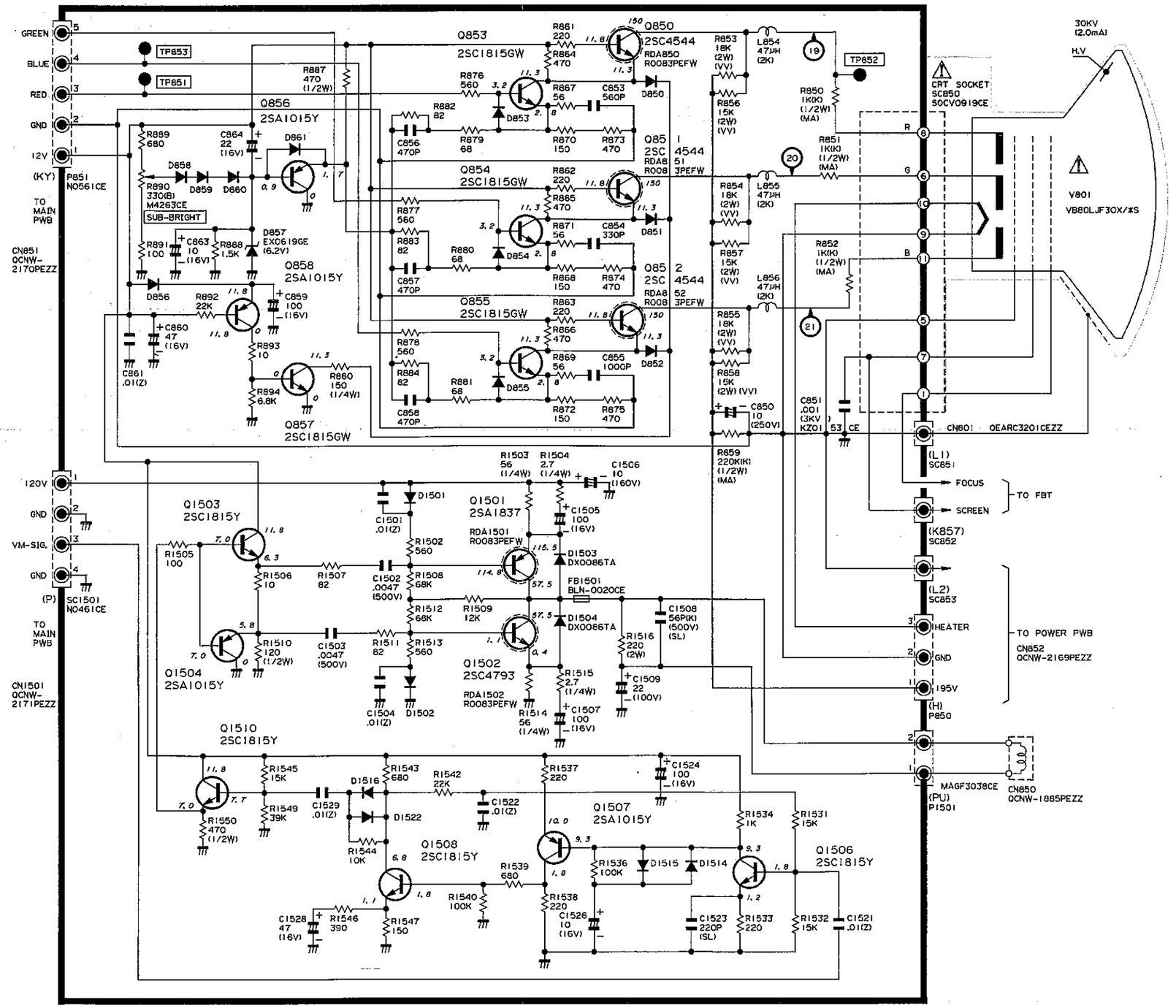
SCHEMATIC DIAGRAM ■ Main Unit 2/2

电路原理图 ■主电路装置－2/2



SCHEMATIC DIAGRAM ■ CRT Socket Unit
电路原理图 ■ CRT管座电路装置

NOTE : 1. THE UNIT OF RESISTANCE OHM IS OMITTED (K=1000 OHMS, M=MEGAOHM).
2. ALL RESISTORS ARE 1/8WATT, UNLESS OTHERWISE NOTED.
3. ALL CAPACITORS ARE μF, UNLESS OTHERWISE NOTED (P=μμF).
4. ALL DIODES ARE 1SS119, UNLESS OTHERWISE NOTED.

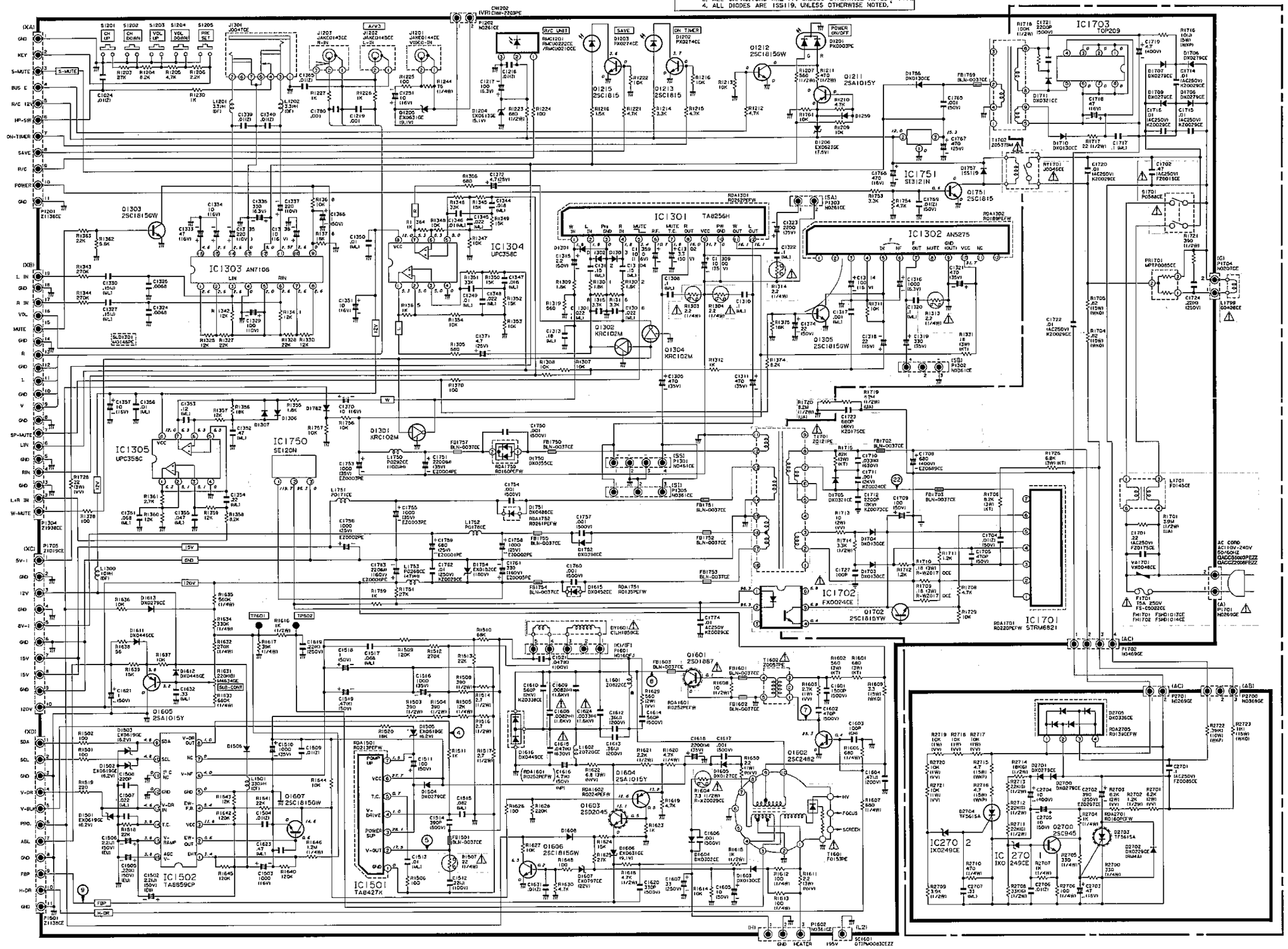


33RX20J	33RX20J

SCHEMATIC DIAGRAM ■ Power Unit

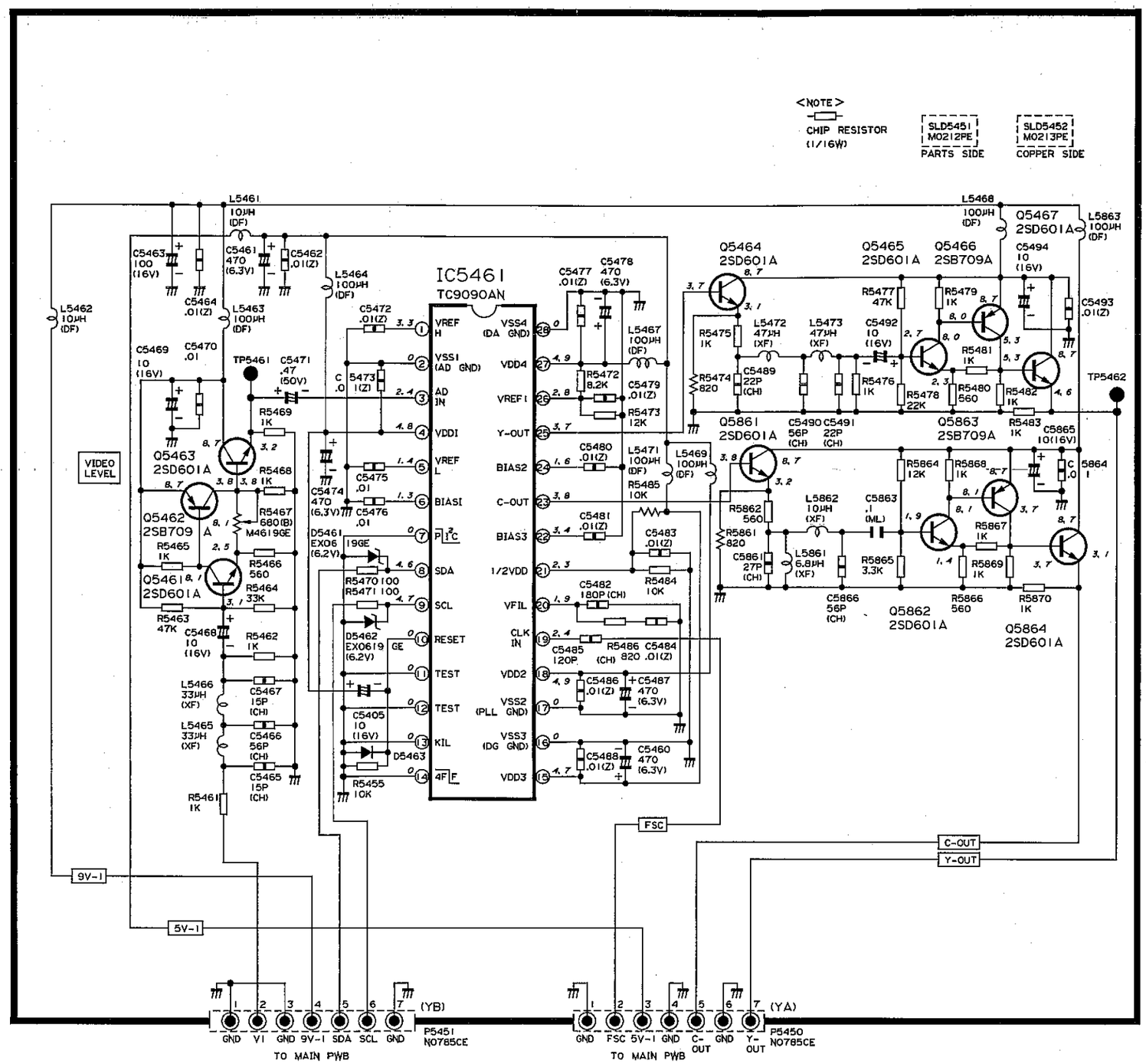
电路原理图 ■电源电路装置

NOTE : 1. THE UNIT OF RESISTANCE OHM IS OMITTED
(K=1000 OHMS, M=MEGAOHM).
2. ALL RESISTORS ARE 1/8WATT, UNLESS OTHERWISE NOTED.
3. ALL CAPACITORS ARE MF, UNLESS OTHERWISE NOTED(P=MMF).
4. ALL DIODES ARE 1SS119, UNLESS OTHERWISE NOTED.



SCHEMATIC DIAGRAM ■ DIG. Unit
电路原理图 ■数字式梳形滤波电路装置

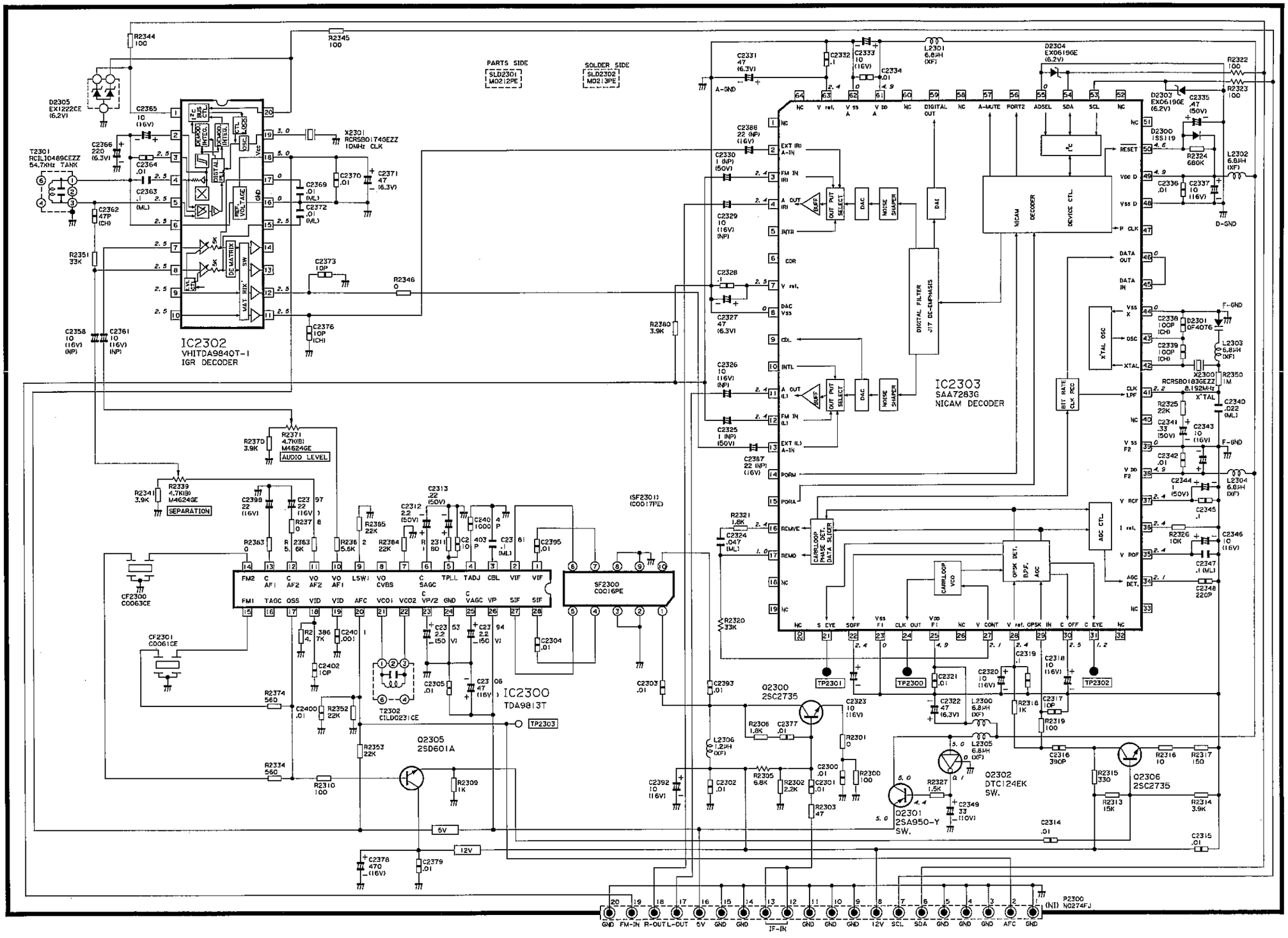
NOTE : 1. THE UNIT OF RESISTANCE OHM IS OMITTED (K=1000 OHMS, M=MEGAOHM).
2. ALL RESISTORS ARE 1/8WATT, UNLESS OTHERWISE NOTED.
3. ALL CAPACITORS ARE μF, UNLESS OTHERWISE NOTED (P=pμF).



SCHEMATIC DIAGRAM ■ NICAM Unit

电路原理图 ■NICAM制式电路装置

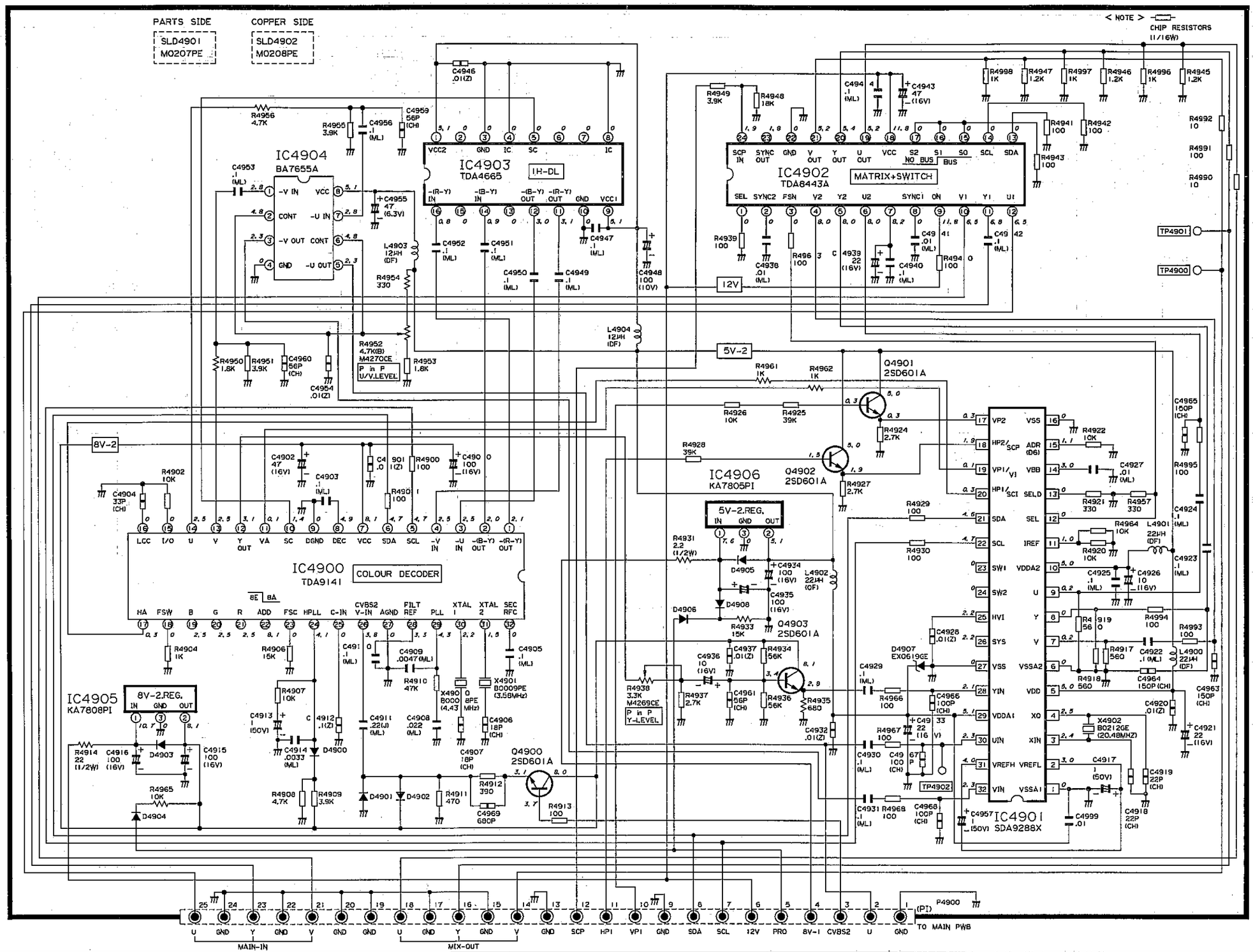
NOTE : 1. THE UNIT OF RESISTANCE OHM IS OMITTED (K=1000 OHMS, M=MEGAOHM).
2. ALL RESISTORS ARE 1/8WATT, UNLESS OTHERWISE NOTED.
3. ALL CAPACITORS ARE μF, UNLESS OTHERWISE NOTED (P=μμF).
4. ALL DIODES ARE 1SS119, UNLESS OTHERWISE NOTED.



SCHEMATIC DIAGRAM ■ P IN P Unit

电路原理图 ■双图象电视电路装置

NOTE : 1. THE UNIT OF RESISTANCE OHM IS OMITTED (K=1000 OHMS. M=MEGAOHM).
2. ALL RESISTORS ARE 1/8WATT, UNLESS OTHERWISE NOTED.
3. ALL CAPACITORS ARE μF, UNLESS OTHERWISE NOTED (P=pμF).
4. ALL DIODES ARE 1SS119, UNLESS OTHERWISE NOTED.

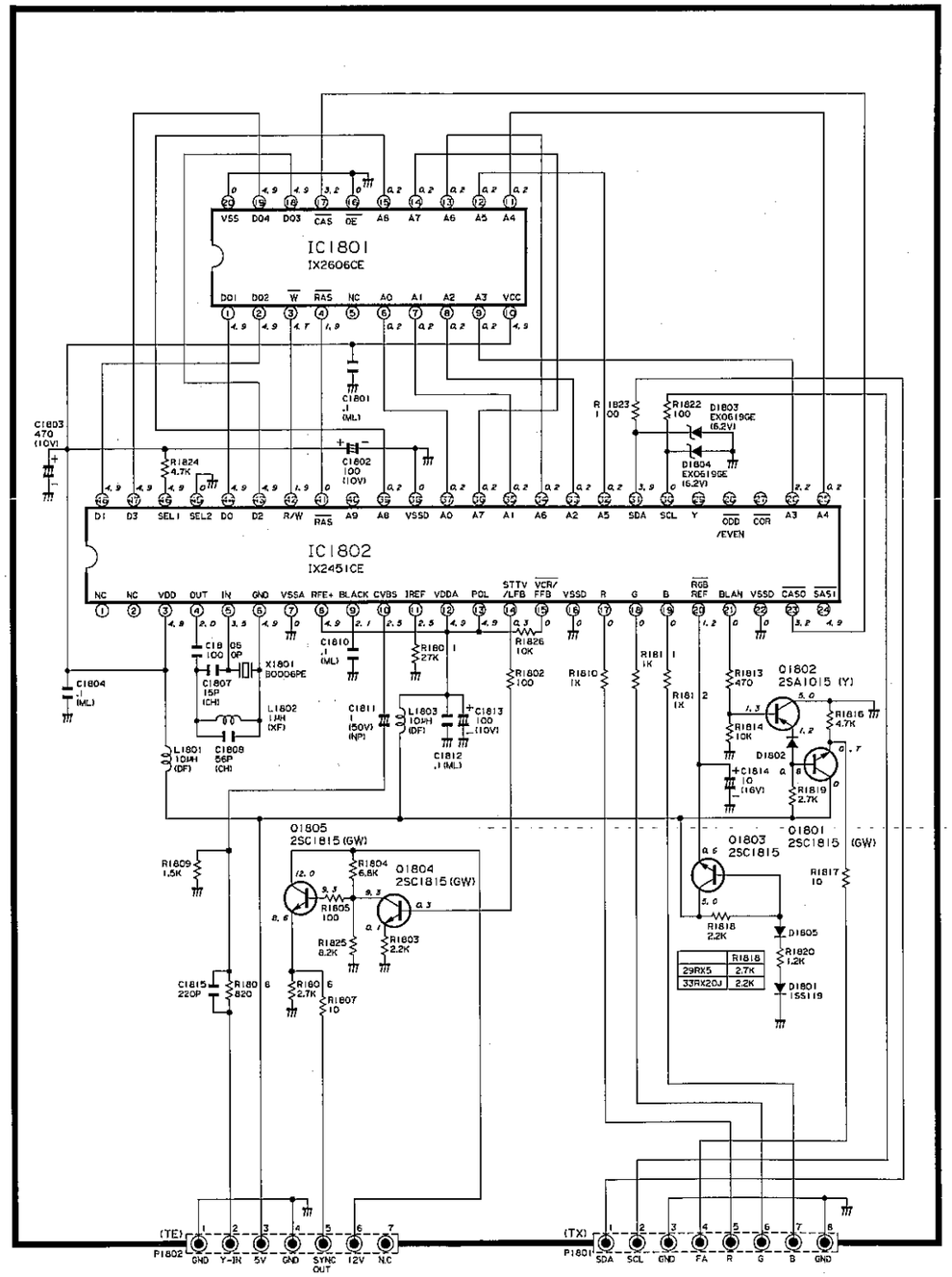


33RX20J 33RX20J

SCHEMATIC DIAGRAM ■ TEXT Unit

电路原理图 ■文字表示电路装置

NOTE : 1. THE UNIT OF RESISTANCE OHM IS OMITTED
(K=1000 OHMS, M=MEGAOHM).
2. ALL RESISTORS ARE 1/8WATT, UNLESS OTHERWISE NOTED.
3. ALL CAPACITORS ARE μF,UNLESS OTHERWISE NOTED (P=μμF).
4. ALL DIODES ARE 1SS119,OTHERWISE NOTED.

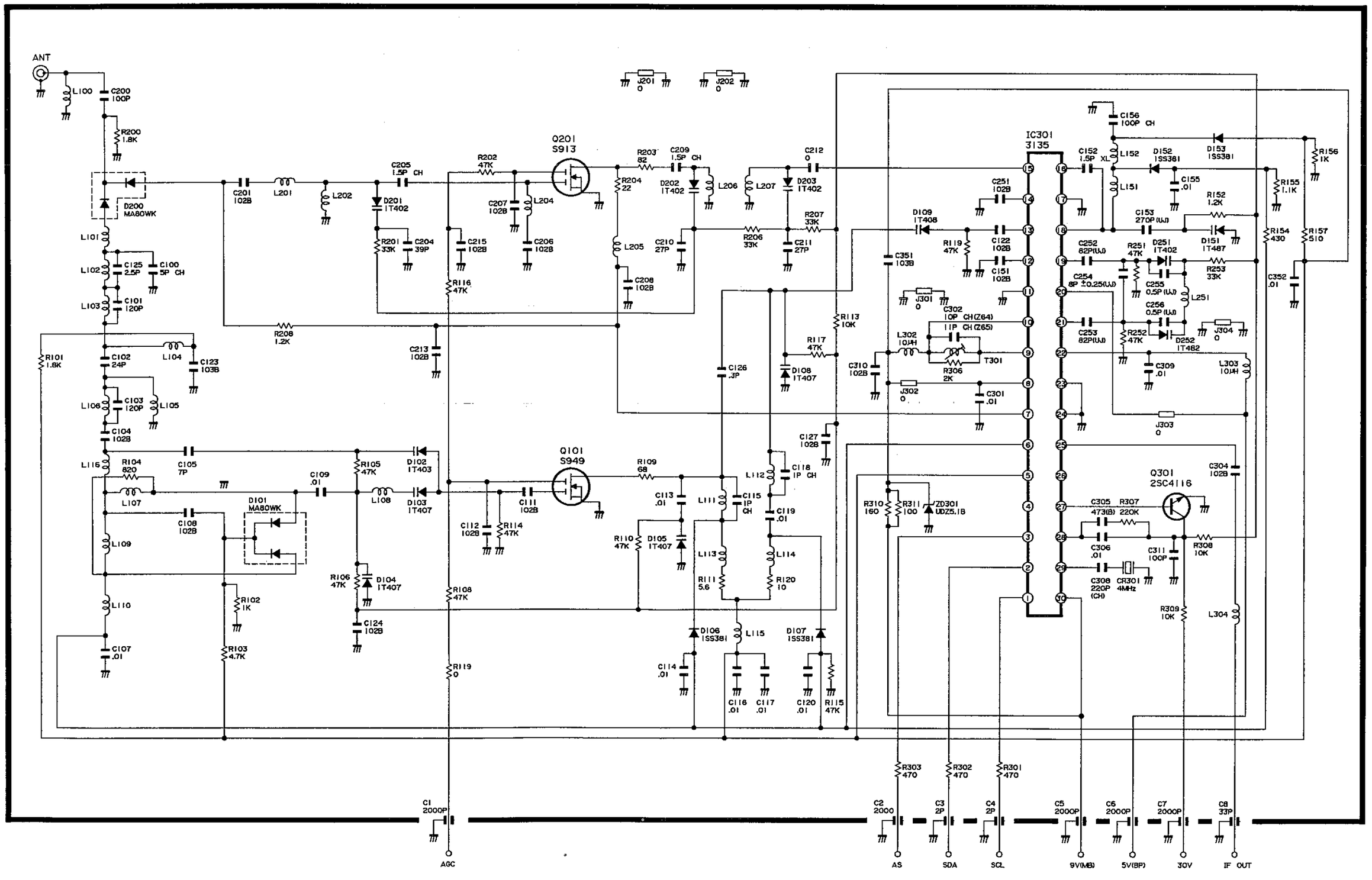


■ Tuner 调谐器

NOTE: The parts here shown are supplied as an assembly but not independently.

注意：在更换零件订货时，请以一套为最小单位，切勿以单件订货。

⚠VTUVTST6HZ64/



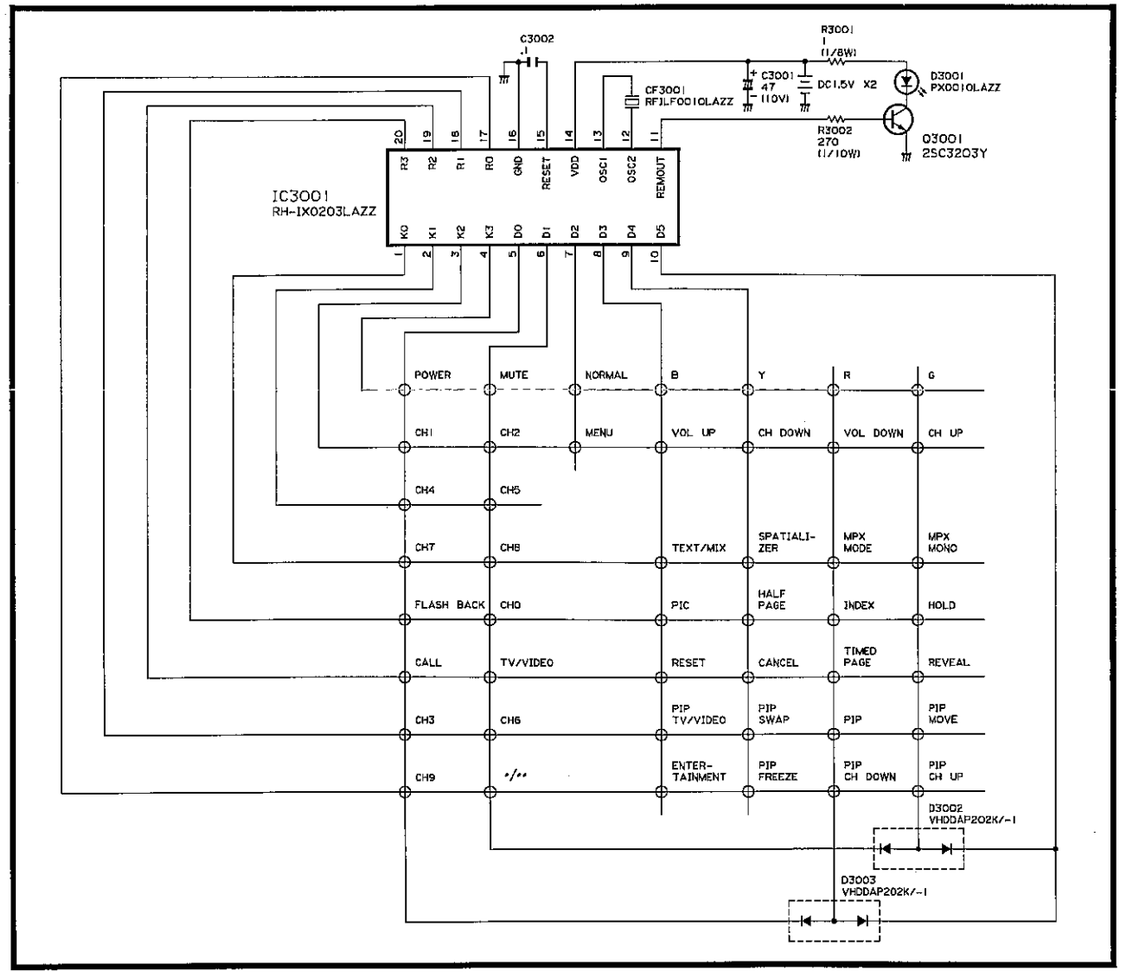
■ Infrared Rmote Control Unit

RRMCG1431PEZZ

红外线遥控器

NOTE: The parts here shown are supplied as an assembly but not independently.

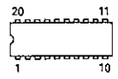
注意：在更换零件订货时，请以一套为最小单位，切勿以单件订货。



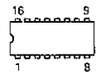
SOLID STATE DEVICE BASE DIAGRAM

固体器件基座图

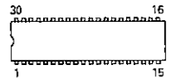
TOP VIEW 俯视图



VHiAN7395K/-1
VHiTA8814N/-1
VHiTA1226N/-1



VHiTA8889AP-1
VHiTA8859CP-1



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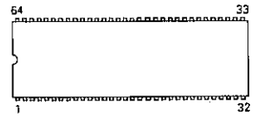

RH-iX2652CEZZ

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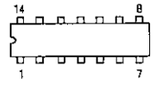
RH-iX2287CEZZ

RH-FX0024CEZZ

RH-iX0249CEZZ

VHiUPC358/-1



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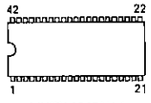
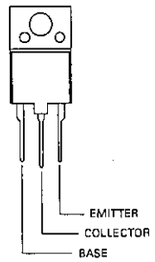


VHiTA1218N/-1

SIDE VIEW 側视图



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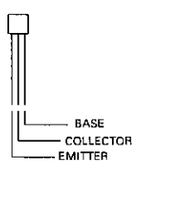
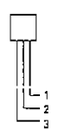
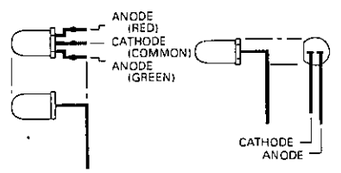
VS2SC2238Y/-1
VS2SC3851A/-1
VS2SC3886A/1E
VS2SC4382//1E
VS2SC4544L81E



VS2SA1015Y/1E
VS2SC1815GW-1
VS2SC1815YW-1



VHiUPC78L05-4



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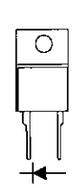

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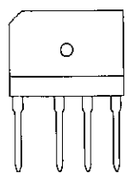

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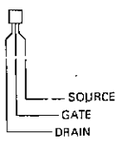
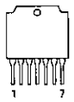


VS2SK30AG//2E



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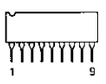

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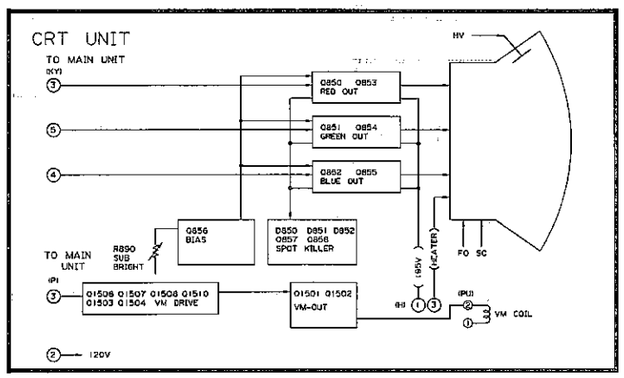
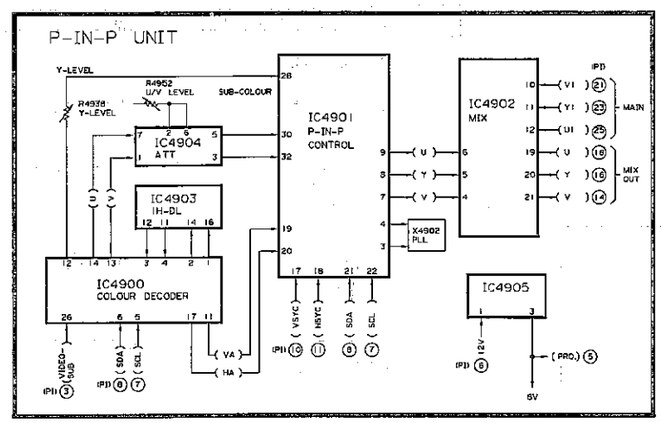
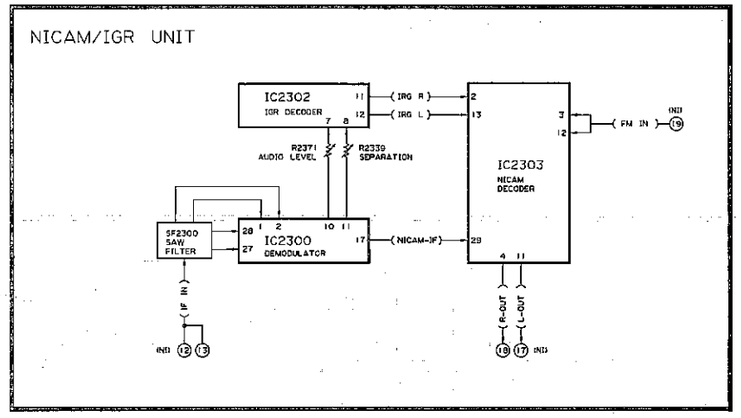
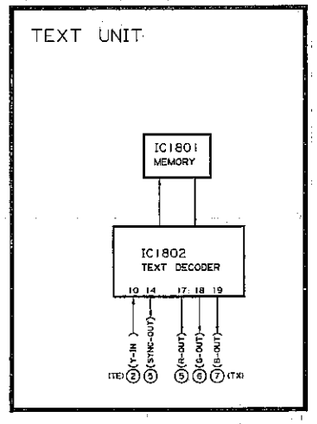
VHiAN5421//-1
VHiBA3308//-1

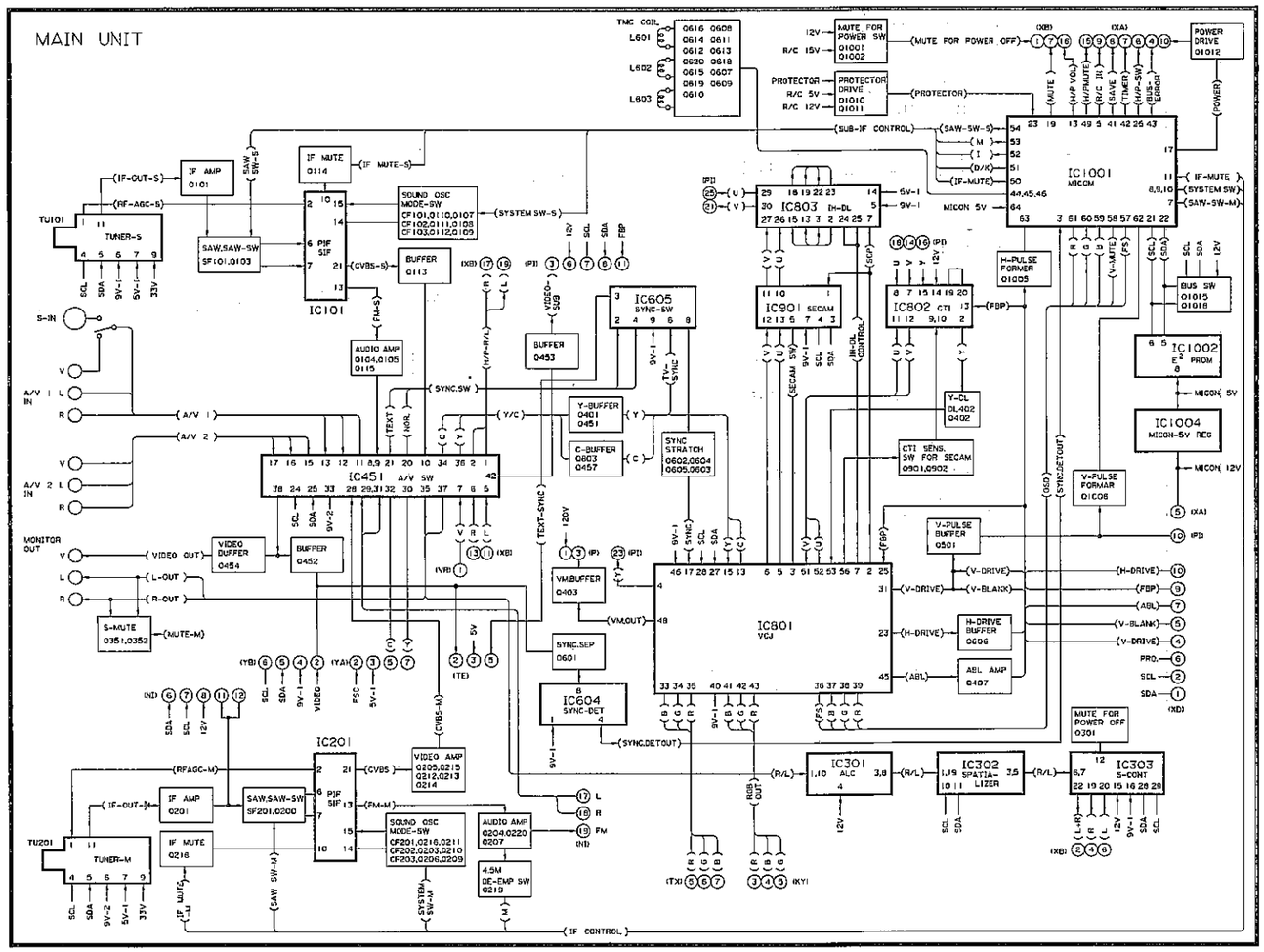
BLOCK DIAGRAM
电路方框图

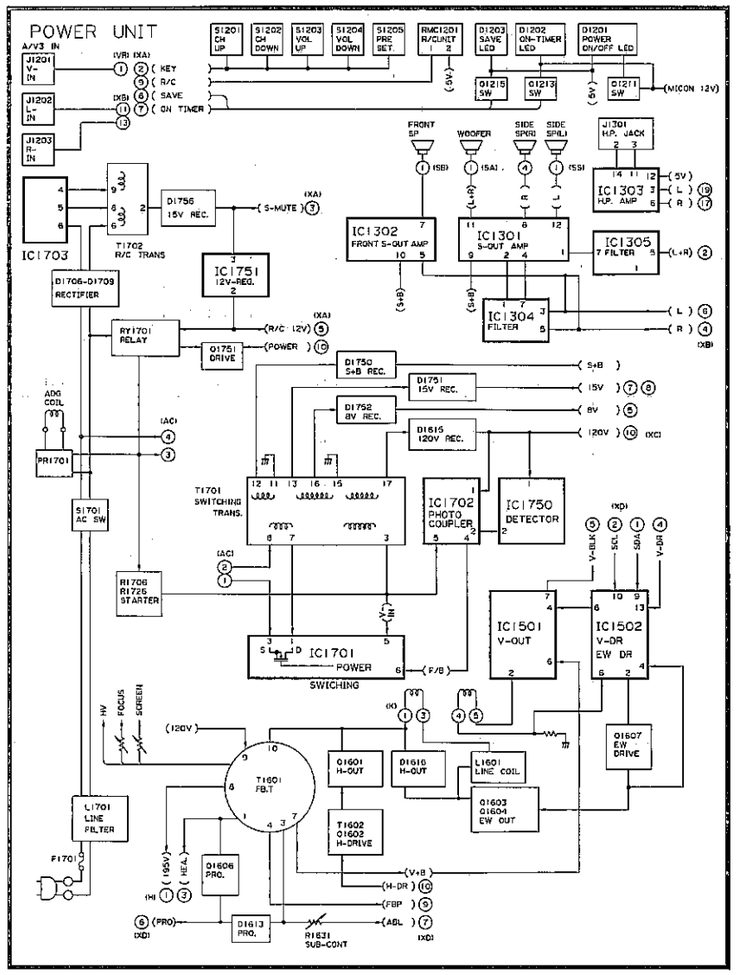


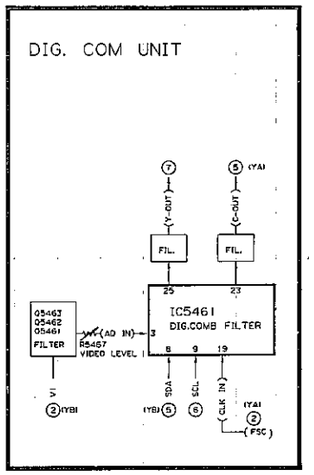


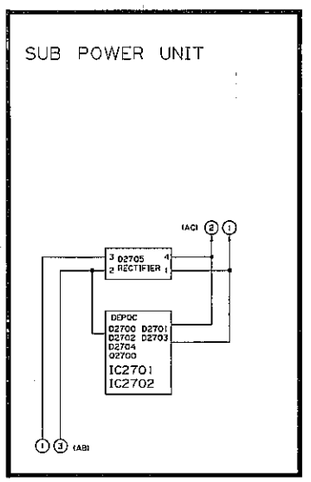












1	2	3	4	5	6	7	8	9	10	11	12

PARTS LIST

PARTS REPLACEMENT

Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "⚠" in the Replacement Parts Lists.
The use of a substitute replacement part which does not have the same safety characteristics as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. **MODEL NUMBER**
2. **REF. NO.**
3. **PART NO.**
4. **DESCRIPTION**

更换零件表

更换零件

本维修说明书对具有特别安全要求的零件均用标记加以识别。在此更换零件表中，具有特别安全要求的电路元件均用⚠标记以便注意识别。更换零件时，为了用户的安全以及电视机原有的工作性能，务请使用夏普规定零件。否则，可能有导致触电、火灾或其他不测事故发生的可能。

更换零件的订货方法

为了能迅速而确实地接受订货、以及正确无误地按时交货，在订货时请将下列各项明确告知。

1. 型号
2. 参考编号
3. 零件编号
4. 零件名称

MARK ★ : SPARE PARTS-DELIVERY SECTION.

附★记号为备用部件的交货部门

Ref. No.	Part No.	★	Description	Code

PICTURE TUBE

⚠ V801	VB80LJF30X/*S	R	CRT	DF
L601	RCiLG0325CEZZ	R	Coil	AQ
L602	RCiLG0322CEZZ	R	Coil	AQ
L603	RCiLG0322CEZZ	R	Coil	AS
⚠ L1799	RCiLG0428CEZZ	R	Degaussing Coil	AZ
⚠ DY1601	RCiLH1859CEN1	R	Deflection Yoke	BL
	PMAGF3038CEZZ	R	Magnet (VMS)	AL
	PMAGG3301CEZZ	R	Magnet	AA
CN601	QCNW-4826CEZZ	R	Connecting Cord	AG
CN602	QCNW-4825CEZZ	R	Connecting Cord	AD
CN801	QEARC3201CEZZ	R	Grounding Strap	AH

PRINTED WIRING BOARD ASSEMBLY (NOT REPLACEMENT ITEM)

PWB-A	DUNTK9356WEW7	-	Main Unit	—
PWB-B	DUNTK8776WEW9	-	CRT Unit	—
PWB-C	DUNTK9357WEW2	-	Power Unit	—
PWB-D	DUNTK9358WEV0	-	DIG.Unit	—
PWB-E	DUNTK9373WEV2	-	NICAM Unit	—
PWB-F	DUNTK9426WEV0	-	P IN P. Unit	—
PWB-G	DUNTK8558WEV4	-	TEXT Unit	—
PWB-H	DUNTK9360WEV2	-	Power 2 Unit	—

PWB-A DUNTK9356WEW7 MAIN UNIT

TUNER AND ASSEMBLY

NOTE: THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT INDEPENDENTLY.

⚠ TU101	VTUVTST6HZ64/	R	Tuner	BE
⚠ TU201	VTUVTST6HZ64/	R	Tuner	BE
UNT201	UBUP-0008CEZZ	R	Unit	AZ

INTEGRATED CIRCUITS

IC101	VHiBA7357S/-1	R	BA7357S	AR
IC201	VHiBA7357S/-1	R	BA7357S	AR
IC203	RH-iX0249CEZZ	R	I.C.	AE
IC301	VHiAN5285K/-1	R	AN5285K	AP
IC302	VHiAN7397K/-1	R	I.C.	AX
IC303	VHiTA8776N/-1	R	TA8776N	AQ
IC451	VHiTA1218AN-1	R	TA1218AN	AX
IC601	VHiKA7809PI-1	R	KIA7809PI	AE
IC602	VHiSi3121N/-1	R	I.C.	AL
IC603	VHiKA7809PI-1	R	KIA7809PI	AE
IC604	VHiM51497L/-1	R	I.C.	AL
IC605	VHiTA7348P/-1	R	TA7348P	AK
IC606	VHiKA7805PI-1	R	KIA7805PI	AE
IC607	VHiKA7805PI-1	R	KIA7805PI	AE
IC608	VHiKA7805PI-1	R	KIA7805PI	AE
IC801	RH-iX2915CEZZ	R	I.C.	AY
IC802	VHiTA8814N/-1	R	TA8814N	AV
IC803	VHiTA8772AN-1	R	TA8772AN	AV
IC901	VHiTA1229N/-1	R	TA1229N	AX
IC1001	RH-iX3081CENA	R	M37207EF (33RX20JB)	BB
IC1001	RH-iX3081CEN2	R	M37207MC-211SP (33RX20Jc)	BB
IC1002	RH-iX2287CEZZ	R	ST24C08B6	AS
IC1003	VHiPST994C/-1	R	PST994C	AD
IC1004	VHiKA7805PI-1	R	KIA7805PI	AE

PWB-A DUNTK9356WEW7
MAIN UNIT (Continued)

TRANSISTORS

Ref. No.	Part No.	★	Description	Code
Q101	VS2SC2735//1E	R	2SC2735	AC
Q103	VS2SD601A//-1	R	2SD601A	AC
Q104	VS2SD601A//-1	R	2SD601A	AC
Q105	VS2SD601A//-1	R	2SD601A	AC
Q107	VS2SD601A//-1	R	2SD601A	AC
Q108	VS2SD601A//-1	R	2SD601A	AC
Q109	VS2SD601A//-1	R	2SD601A	AC
Q110	VS2SC2735//1E	R	2SC2735	AC
Q111	VS2SC2735//1E	R	2SC2735	AC
Q112	VS2SC2735//1E	R	2SC2735	AC
Q113	VS2SC1815GW-1	R	2SC1815GW	AB
Q114	VS2SD601A//-1	R	2SD601A	AC
Q115	VS2SD601A//-1	R	2SD601A	AC
Q200	VS2SD601A//-1	R	2SD601A	AC
Q201	VS2SC2735//1E	R	2SC2735	AC
Q203	VS2SC2735//1E	R	2SC2735	AC
Q204	VS2SD601A//-1	R	2SD601A	AC
Q205	VS2SD601A//-1	R	2SD601A	AC
Q206	VS2SC2735//1E	R	2SC2735	AC
Q207	VS2SD601A//-1	R	2SD601A	AC
Q209	VS2SD601A//-1	R	2SD601A	AC
Q210	VS2SD601A//-1	R	2SD601A	AC
Q211	VS2SD601A//-1	R	2SD601A	AC
Q212	VS2SD601A//-1	R	2SD601A	AC
Q213	VS2SD601A//-1	R	2SD601A	AC
Q214	VS2SB709A//-1	R	2SB709A	AA
Q215	VS2SD601A//-1	R	2SD601A	AC
Q216	VS2SC2735//1E	R	2SC2735	AC
Q218	VS2SD601A//-1	R	2SD601A	AC
Q219	VS2SD601A//-1	R	2SD601A	AC
Q220	VS2SD601A//-1	R	2SD601A	AC
Q301	VS2SD601A//-1	R	2SD601A	AC
Q351	VS2SD601A//-1	R	2SD601A	AC
Q352	VS2SD601A//-1	R	2SD601A	AC
Q401	VS2SD601A//-1	R	2SD601A	AC
Q402	VS2SA1015Y/1E	R	2SA1015Y	AC
Q403	VS2SD601A//-1	R	2SD601A	AC
Q407	VS2SD601A//-1	R	2SD601A	AC
Q451	VS2SD601A//-1	R	2SD601A	AC
Q452	VS2SD601A//-1	R	2SD601A	AC
Q453	VS2SD601A//-1	R	2SD601A	AC
Q454	VS2SC1815GW-1	R	2SC1815GW	AB
Q457	VS2SD601A//-1	R	2SD601A	AC
Q501	VS2SD601A//-1	R	2SD601A	AC
Q601	VS2SA1015Y/1E	R	2SA1015Y	AC
Q602	VS2SD601A//-1	R	2SD601A	AC
Q603	VS2SD601A//-1	R	2SD601A	AC
Q604	VS2SB709A//-1	R	2SB709A	AA
Q605	VS2SA1015Y/1E	R	2SA1015Y	AC
Q606	VS2SD601A//-1	R	2SD601A	AC
Q607	VS2SA1015Y/1E	R	2SA1015Y	AC
Q608	VS2SA1015Y/1E	R	2SA1015Y	AC
Q609	VS2SA1015Y/1E	R	2SA1015Y	AC
Q610	VS2SA1015Y/1E	R	2SA1015Y	AC
Q611	VS2SA1015Y/1E	R	2SA1015Y	AC
Q612	VS2SA1015Y/1E	R	2SA1015Y	AC
Q613	VS2SD601A//-1	R	2SD601A	AC
Q614	VS2SD601A//-1	R	2SD601A	AC
Q615	VS2SD601A//-1	R	2SD601A	AC
Q616	VS2SD601A//-1	R	2SD601A	AC
Q618	VS2SD601A//-1	R	2SD601A	AC
Q619	VS2SD601A//-1	R	2SD601A	AC
Q620	VS2SD601A//-1	R	2SD601A	AC
Q801	VS2SD601A//-1	R	2SD601A	AC
Q802	VS2SD601A//-1	R	2SD601A	AC
Q803	VS2SD601A//-1	R	2SD601A	AC
Q901	VS2SD601A//-1	R	2SD601A	AC
Q902	VS2SD601A//-1	R	2SD601A	AC
Q1001	VS2SD601A//-1	R	2SD601A	AC
Q1002	VS2SD601A//-1	R	2SD601A	AC
Q1004	VS2SD601A//-1	R	2SD601A	AC
Q1005	VS2SD601A//-1	R	2SD601A	AC
Q1006	VS2SD601A//-1	R	2SD601A	AC
Q1009	VS2SD601A//-1	R	2SD601A	AC
Q1010	VS2SB709A//-1	R	2SB709A	AA
Q1011	VS2SB709A//-1	R	2SB709A	AA
Q1012	VS2SD601A//-1	R	2SD601A	AC
Q1013	VS2SD601A//-1	R	2SD601A	AC
Q1014	VS2SD601A//-1	R	2SD601A	AC
Q1015	VS2SK583///-1	R	2SK583	AE
Q1018	VS2SK583///-1	R	2SK583	AE

DIODES

Ref. No.	Part No.	★	Description	Code
D103	VHD1SS152//-1	R	1SS152	AB
D203	VHD1SS152//-1	R	1SS152	AB
D307	VHD1SS119//1E	R	1SS119	AA
D401	VHD1SS119//1E	R	1SS119	AA
D402	RH-EX0639GEZZ	R	Zener Diode 12V	AA
D403	VHDDAN202K/-1	R	DAN202K	AB
D451	RH-EX0631GEZZ	R	Zener Diode 9.1V	AA
D452	RH-EX0631GEZZ	R	Zener Diode 9.1V	AA
D453	RH-EX0631GEZZ	R	Zener Diode 9.1V	AA
D454	RH-EX0619GEZZ	R	Zener Diode 6.2V	AA
D455	RH-EX0619GEZZ	R	Zener Diode 6.2V	AA
D600	RH-EX0604GEZZ	R	Zener Diode 4.1V	AB
D601	VHD1SS119//1E	R	1SS119	AA
D602	VHD1SS119//1E	R	1SS119	AA
D603	VHD1SS119//1E	R	1SS119	AA
D604	VHD1SS119//1E	R	1SS119	AA
D605	VHD1SS119//1E	R	1SS119	AA
D606	RH-EX0604GEZZ	R	Zener Diode 4.1V	AB
D607	VHD1SS119//1E	R	1SS119	AA
D608	VHD1SS119//1E	R	1SS119	AA
D609	VHD1SS119//1E	R	1SS119	AA
D610	VHD1SS119//1E	R	1SS119	AA
D611	VHD1SS119//1E	R	1SS119	AA
D613	VHD1SS119//1E	R	1SS119	AA
D614	VHD1SS119//1E	R	1SS119	AA
D615	VHD1SS119//1E	R	1SS119	AA
D616	VHD1SS119//1E	R	1SS119	AA
D617	VHD1SS119//1E	R	1SS119	AA
D801	RH-EX0586CEZZ	R	Zener Diode 9.1V	AB
D805	RH-DX0279CEZZ	R	Diode	AB
D808	VHD1SS119//1E	R	1SS119	AA
D809	VHDDAN202K/-1	R	DAN202K	AB
D811	RH-EX0615GEZZ	R	Zenner Diode 5.6V	AA
D812	RH-EX0615GEZZ	R	Zenner Diode 5.6V	AA
D813	RH-EX0615GEZZ	R	Zenner Diode 5.6V	AA
D1001	VHD1SS119//1E	R	1SS119	AA
D1002	VHD1SS119//1E	R	1SS119	AA
D1003	VHD1SS119//1E	R	1SS119	AA
D1005	RH-EX0619GEZZ	R	Zener Diode 6.2V	AA
D1006	VHD1SS119//1E	R	1SS119	AA
D1008	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE
D1009	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE
D1010	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE
D1012	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE
D1014	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE
D1016	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE
D1019	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE
D1020	VHD1SS119//1E	R	1SS119	AA
D1023	VHD1SS119//1E	R	1SS119	AA
D1024	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE
D1027	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE
D1030	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE

PWB-A DUNTK9356WEW7
MAIN UNIT (Continued)

Ref. No.	Part No.	★	Description	Code
D1032	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE
D1034	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE
D1037	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE
D1040	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE
D1041	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE
D1043	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE
D1045	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE
D1047	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE
D1050	RH-EX1222CEZZ	R	Zener Diode 6.2V	AE
D1052	RH-EX0619GEZZ	R	Zener Diode 6.2V	AA
D1053	VHD1SS119//1E	R	1SS119	AA
D1054	VHD1SS119//1E	R	1SS119	AA
D1056	VHD1SS119//1E	R	1SS119	AA
D1057	VHD1SS119//1E	R	1SS119	AA
D1058	VHD1SS119//1E	R	1SS119	AA
D1070	VHD1SS119//1E	R	1SS119	AA

PACKAGED CIRCUITS

X801	RCRSB0067CEZZ	R	Crystal, 4.43MHz	AQ
X802	RCRSB0001PEZZ	R	Crystal, 3.58MHz	AL
X901	RCRSB0004PEZZ	R	Crystal,4MHz	AH

COILS AND TRANSFORMERS

CF101	RFILA0042CEZZ	R	Ceramic Filter	AD
CF102	RFILA0093CEZZ	R	Ceramic Filter	AC
CF103	RFILC0081GEZZ	R	Ceramic Filter	AD
CF201	RFILA0042CEZZ	R	Ceramic Filter	AD
CF202	RFILA0093CEZZ	R	Ceramic Filter	AC
CF203	RFILC0081GEZZ	R	Ceramic Filter	AD
CF601	RFILA0020CEZZ	R	Ceramic Filter	AD
CF801	RFILA0034CEZZ	R	Ceramic Filter	AD
CF1001	RFILA0084CEZZ	R	Ceramic Filter	AE
DL402	RCILZ0900CEZZ	R	Delay Line	AP
L101	VP-DF680K0000	R	Peaking 68µH	AB
L102	VP-DF270K0000	R	Peaking 27µH	AB
L103	VP-XF1R2K0000	R	Peaking 1.2µH	AB
L105	VP-XF270K0000	R	Peaking 27µH	AB
L106	VP-XF390K0000	R	Peaking 39µH	AB
L107	VP-XF120K0000	R	Peaking 12µH	AB
L200	VP-XF270K0000	R	Peaking 27µH	AB
L201	VP-DF680K0000	R	Peaking 68µH	AB
L202	VP-DF270K0000	R	Peaking 27µH	AB
L203	VP-XF1R2K0000	R	Peaking 1.2µH	AB
L206	VP-XF390K0000	R	Peaking 39µH	AB
L209	VP-XF120K0000	R	Peaking 12µH	AB
L210	VP-DF680K0000	R	Peaking 68µH	AB
L451	VP-DF100K0000	R	Peaking 10µH	AB
L452	VP-DF100K0000	R	Peaking 10µH	AB
L901	VP-XF120K0000	R	Peaking 12µH	AB
L1001	VP-DF1R0K0000	R	Peaking 1µH	AB
SF101	RFILC0015PEZZ	R	Surface Accoustic Wave Filter	AR
SF201	RFILC0015PEZZ	R	Surface Accoustic Wave Filter	AR
T103	RCILD0238CEZZ	R	Detection Coil	AE
T104	RCILD0239CEZZ	R	Detection Coil	AE
T203	RCILD0238CEZZ	R	Detection Coil	AE
T204	RCILD0239CEZZ	R	Detection Coil	AE

CONTROLS

R116	RVR-M4630GEZZ	R	47k(B), RF-AGC(S)	AB
R224	RVR-M4620GEZZ	R	1k(B), V-LEVEL	AB
R226	RVR-M4630GEZZ	R	47k(B), RF-AGC(M)	AB

Ref. No.	Part No.	★			Description	Code
CAPACITORS						
C102	VCEAGA1CW226M	R	22	16V	Electrolytic	AB
C103	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C104	VCEA0A1CW477M	R	470	16V	Electrolytic	AC
C105	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C106	VCEAGA0JW107M	R	100	6.3V	Electrolytic	AB
C107	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C108	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C109	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C110	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C111	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C112	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C113	VCQYTA1HM683J	R	0.068	50V	Mylar	AB
C114	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C115	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C116	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C117	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C118	VCCCCY1HH150J	R	15p	50V	Ceramic	AA
C119	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C120	VCCCCY1HH101J	R	100p	50V	Ceramic	AA
C121	VCFYHA1HA684J	R	0.68	50V	M.Polypro	AD
C122	VCCCCY1HH330J	R	33p	50V	Ceramic	AA
C123	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C124	VCEAGA1CW476M	R	47	16V	Electrolytic	AB
C125	VCEAGA1HW225M	R	2.2	50V	Electrolytic	AB
C126	VCEAGA1HW475M	R	4.7	50V	Electrolytic	AB
C127	VCQYTA1HM104K	R	0.1	50V	Mylar	AC
C128	VCQYTA1HM183K	R	0.018	50V	Mylar	AB
C129	VCCCCY1HH180J	R	18p	50V	Ceramic	AA
C130	VCCCCY1HH180J	R	18p	50V	Ceramic	AA
C131	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C132	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C136	VCEAGA1CW476M	R	47	16V	Electrolytic	AB
C137	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C138	VCEAGA1CW226M	R	22	16V	Electrolytic	AB
C139	VCEAGA1CW337M	R	330	16V	Electrolytic	AC
C201	VCEAGA1EW226M	R	22	25V	Electrolytic	AA
C202	VCEAGA0JW107M	R	100	6.3V	Electrolytic	AB
C203	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C204	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C205	VCEA0A1CW477M	R	470	16V	Electrolytic	AC
C206	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C207	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C208	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C209	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C210	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C216	VCEAGA1HW225M	R	2.2	50V	Electrolytic	AB
C217	VCEAGA1HW475M	R	4.7	50V	Electrolytic	AB
C218	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C219	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C220	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C221	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C222	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C223	VCCCCY1HH150J	R	15p	50V	Ceramic	AA
C224	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C225	VCCCCY1HH101J	R	100p	50V	Ceramic	AA
C226	VCFYHA1HA684J	R	0.68	50V	M.Polypro	AD
C227	VCCCCY1HH120J	R	12p	50V	Ceramic	AA
C228	VCQYTA1HM104K	R	0.1	50V	Mylar	AC
C229	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C230	VCEAGA1CW476M	R	47	16V	Electrolytic	AB
C231	VCCCCY1HH180J	R	18p	50V	Ceramic	AA
C232	VCCCCY1HH180J	R	18p	50V	Ceramic	AA
C233	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C234	VCQYTA1HM104K	R	0.1	50V	Mylar	AC
C235	VCQYTA1HM103K	R	0.01	50V	Mylar	AB
C236	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C237	VCEAGA1HW106M	R	10	50V	Electrolytic	AC
C238	VCQYTA1HM103J	R	0.01	50V	Mylar	AA
C239	VCCCCY1HH680J	R	68p	50V	Ceramic	AA
C240	VCEAGA1CW476M	R	47	16V	Electrolytic	AB

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MAIN UNIT (Continued)

Ref. No.	Part No.	★			Description	Code
C241	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C243	VCCCCY1HH2R0C	R	2.0p	50V	Ceramic	AA
C245	VCEA0A1CW477M	R	470	16V	Electrolytic	AC
C248	VCKYCY1CB333K	R	0.033	16V	Ceramic	AA
C257	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C258	VCEAGA1CW476M	R	47	16V	Electrolytic	AB
C259	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C261	VCCCCY1HH271J	R	270p	50V	Ceramic	AA
C262	VCCCCY1HH680J	R	68p	50V	Ceramic	AA
C264	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C265	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C301	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C302	VCEAGA1HW475M	R	4.7	50V	Electrolytic	AB
C303	VCEAGA1EW475M	R	4.7	25V	Electrolytic	AA
C305	VCEAGA1CW476M	R	47	16V	Electrolytic	AB
C306	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C307	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C308	VCEAGA1EW475M	R	4.7	25V	Electrolytic	AA
C309	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C310	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C311	VCEAGA1HW105M	R	1	50V	Electrolytic	AC
C312	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C313	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C315	VCEAGA1CW226M	R	22	16V	Electrolytic	AB
C316	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C317	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C318	VCEAGA1CW336M	R	33	16V	Electrolytic	AB
C319	VCQYTA1HM473J	R	0.047	50V	Mylar	AA
C320	VCQYTA1HM473J	R	0.047	50V	Mylar	AA
C321	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C324	VCKYCY1HB562K	R	5600p	50V	Ceramic	AA
C325	VCEAGA1HW335M	R	3.3	50V	Electrolytic	AB
C326	VCEAGA1HW105M	R	1	50V	Electrolytic	AC
C327	VCKYCY1CB393K	R	0.039	16V	Ceramic	AA
C328	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C330	VCKYCY1CB393K	R	0.039	16V	Ceramic	AA
C331	VCKYCY1CB393K	R	0.039	16V	Ceramic	AA
C332	VCEAGA1HW105M	R	1	50V	Electrolytic	AC
C333	VCEAGA1HW225M	R	2.2	50V	Electrolytic	AB
C334	VCEAGA1HW225M	R	2.2	50V	Electrolytic	AB
C335	VCEAGA1HW105M	R	1	50V	Electrolytic	AC
C336	VCEAGA1HW106M	R	10	50V	Electrolytic	AC
C337	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C338	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C339	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C340	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C341	VCEAGA1EW475M	R	4.7	25V	Electrolytic	AA
C342	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C343	VCEAGA1CW476M	R	47	16V	Electrolytic	AB
C346	VCEAGA1AW476M	R	47	10V	Electrolytic	AA
C347	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C351	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C352	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C353	VCE9GA1CW106M	R	10	16V	Elect.(N.P)	AB
C354	VCE9GA1CW106M	R	10	16V	Elect.(N.P)	AB
C356	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C357	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C358	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C359	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C360	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C361	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C363	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C365	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C367	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C369	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C370	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C372	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C373	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C375	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C401	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C402	VCFYFA1HA124J	R	0.12	50V	M.Polypro	AC
C403	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C404	VCEAGA1HW225M	R	2.2	50V	Electrolytic	AB
C405	VCEAGA1HW105M	R	1	50V	Electrolytic	AC
C410	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C411	VCEAGA1CW227M	R	220	16V	Electrolytic	AC
C414	VCEAGA1CW476M	R	47	16V	Electrolytic	AB
C415	VCCCCY1HH181J	R	180p	50V	Ceramic	AA
C417	VCKYD41CY103N	R	0.01	16V	Ceramic	AA
C451	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C453	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C454	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C455	VCE9GA1CW106M	R	10	16V	Elect.(N.P)	AB
C456	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C457	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C458	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C459	VCEAGA1CW108M	R	1000	16V	Electrolytic	AD
C460	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C462	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C463	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C473	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C477	VCEA0A1CW477M	R	470	16V	Electrolytic	AC
C480	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C482	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C601	VCEAGA1EW227M	R	220	25V	Electrolytic	AC
C602	VCEAGA1CW227M	R	220	16V	Electrolytic	AC
C603	VCEAGA1EW227M	R	220	25V	Electrolytic	AC
C604	VCEAGA1CW227M	R	220	16V	Electrolytic	AC
C605	VCEAGA1EW227M	R	220	25V	Electrolytic	AC
C606	VCEAGA1CW227M	R	220	16V	Electrolytic	AC
C607	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C608	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C609	VCKYCY1EB123K	R	0.012	25V	Ceramic	
C610	VCEAGA1HW224M	R	0.22	50V	Electrolytic	AA
C611	VCKYCY1HB182K	R	1800p	50V	Ceramic	AA
C612	VCKYCY1HB821K	R	820p	50V	Ceramic	AA
C613	VCEAGA1HW224M	R	0.22	50V	Electrolytic	AA
C614	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C615	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C616	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C617	VCEAGA1CW106M	R	10	16V	Electrolitic	AA
C618	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C619	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C620	VCEAGA1CW476M	R	47	16V	Electrolytic	AB
C621	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C622	VCCCCY1HH221J	R	220p	50V	Ceramic	AA
C623	VCEAGA1HW225M	R	2.2	50V	Electrolytic	AB
C624	VCEAGA1HW225M	R	2.2	50V	Electrolytic	AB
C625	VCFYFA1HA224J	R	0.22	50V	M.Polypro	AB
C626	VCKYCY1HF223Z	R	0.022	50V	Ceramic	AB
C627	VCEAGA1HW225M	R	2.2	50V	Electrolytic	AB
C628	VCFYFA1HA334J	R	0.33	50V	M.Polypro	AB
C629	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C631	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C632	VCFYFA1HA334J	R	0.33	50V	M.Polypro	AB
C633	VCFYFA1HA334J	R	0.33	50V	M.Polypro	AB
C634	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C637	VCKYAT1EX103N	R	0.01	25V	Ceramic	AA
C638	VCQYTA1HM104K	R	0.1	50V	Mylar	AC
C639	VCQYTA1HM104K	R	0.1	50V	Mylar	AC
C640	VCQYTA1HM104K	R	0.1	50V	Mylar	AC
C641	VCQYTA1HM104K	R	0.1	50V	Mylar	AC
C801	VCCCCY1HH120J	R	12p	50V	Ceramic	AA
C802	VCQYTA1HM222J	R	2200p	50V	Mylar	AA
C803	VCEAGA1HW474M	R	0.47	50V	Electrolytic	AA
C804	VCCCCY1HH120J	R	12p	50V	Ceramic	AA
C805	VCEAGA1CW107M	R	100	16V	Electrolytic	AB

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MAIN UNIT (Continued)

Ref. No.	Part No.	★			Description	Code
C806	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C807	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C808	VCEA0A1CW477M	R	470	16V	Electrolytic	AC
C809	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C810	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C811	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C812	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C813	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C814	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C815	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C816	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C817	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C818	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C819	VCCCCY1HH470J	R	47p	50V	Ceramic	AA
C820	VCCCCY1HH470J	R	47p	50V	Ceramic	AA
C821	VCCCCY1HH470J	R	47p	50V	Ceramic	AA
C822	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C823	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C824	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C825	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C826	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C827	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C828	VCFYFA1HA124J	R	0.12	50V	M.Polypro	AC
C829	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C830	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C831	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C832	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C833	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C834	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C835	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C836	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C837	VCEAGA1HW474M	R	0.47	50V	Electrolytic	AA
C838	VCEAGA1HW474M	R	0.47	50V	Electrolytic	AA
C839	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C840	VCEA0A1CW477M	R	470	16V	Electrolytic	AC
C841	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C842	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C843	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C844	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C845	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C846	VCEAGA1HW474M	R	0.47	50V	Electrolytic	AA
C847	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C848	VCEAGA1AW476M	R	47	10V	Electrolytic	AA
C849	VCEAGA1HW225M	R	2.2	50V	Electrolytic	AB
C851	VCEAGA1HW225M	R	2.2	50V	Electrolytic	AB
C852	VCEAGA1HW225M	R	2.2	50V	Electrolytic	AB
C901	VCKYPA1HB101K	R	100p	50V	Ceramic	AA
C902	VCCCCY1HH101J	R	100p	50V	Ceramic	AA
C903	VCEAGA1CW476M	R	47	16V	Electrolytic	AB
C904	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C905	VCCCCY1HH150J	R	15p	50V	Ceramic	AA
C906	VCFYFA1HA684J	R	0.68	50V	M.Polypro	AD
C907	VCFYFA1HA684J	R	0.68	50V	M.Polypro	AD
C908	VCCCCY1HH101J	R	100p	50V	Ceramic	AA
C909	VCKYCY1HF223Z	R	0.022	50V	Ceramic	AB
C910	VCEAGA1HW225M	R	2.2	50V	Electrolytic	AB
C911	VCEAGA1HW225M	R	2.2	50V	Electrolytic	AB
C912	VCQYTA1HM683J	R	0.068	50V	Mylar	AB
C913	VCQYTA1HM223J	R	0.022	50V	Mylar	AA
C914	VCQYTA1HM563J	R	0.056	50V	Mylar	AB
C915	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C916	VCKYPA1HB102K	R	1000p	50V	Ceramic	AA
C917	VCCCCY1HH101J	R	100p	50V	Ceramic	AA
C918	VCCCCY1HH820J	R	82p	50V	Ceramic	AA
C919	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C920	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C921	VCCCCY1HH330J	R	33p	50V	Ceramic	AA
C922	VCCCCY1HH330J	R	33p	50V	Ceramic	AA
C950	VCEAGA1HW225M	R	2.2	50V	Electrolytic	AB
C951	VCEAGA1HW105M	R	1	50V	Electrolytic	AC
C952	VCFYFA1HA684J	R	0.68	50V	M.Polypro	AD
C953	VCFYFA1HA684J	R	0.68	50V	M.Polypro	AD
C954	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C955	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C956	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C957	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C1001	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C1002	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C1003	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C1004	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C1005	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C1006	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C1007	VCCCCY1HH560J	R	56p	50V	Ceramic	AA
C1008	VCEAGA1AW107M	R	100	10V	Electrolytic	AB
C1009	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C1012	VCEAGA1HW105M	R	1	50V	Electrolytic	AC
C1015	VCEAGA1AW476M	R	47	10V	Electrolytic	AA
C1016	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C1019	VCEAGA1CW226M	R	22	16V	Electrolytic	AB
C1020	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C1021	VCCCCY1HH560J	R	56p	50V	Ceramic	AA
C1022	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C1024	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C1031	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C1032	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C1034	VCKYPA1HB221K	R	220p	50V	Ceramic	AA
C1035	VCEAGA1HW475M	R	4.7	50V	Electrolytic	AB
C1040	VCEAGA1CW226M	R	22	16V	Electrolytic	AB

RESISTORS

R101	VRS-CY1JF680J	R	68	1/16W	Metal Oxide	AA
R102	VRS-CY1JF680J	R	68	1/16W	Metal Oxide	AA
R103	VRS-CY1JF151J	R	150	1/16W	Metal Oxide	AA
R104	VRS-CY1JF680J	R	68	1/16W	Metal Oxide	AA
R105	VRS-CY1JF392J	R	3.9k	1/16W	Metal Oxide	AA
R106	VRS-CY1JF122J	R	1.2k	1/16W	Metal Oxide	AA
R107	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R108	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R109	VRD-RA2BE682J	R	6.8k	1/8W	Carbon	AA
R110	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R111	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R112	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R113	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R115	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R117	VRD-RA2BE273J	R	27k	1/8W	Carbon	AA
R118	VRS-CY1JF154J	R	150k	1/16W	Metal Oxide	AA
R119	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R120	VRD-RA2BE184J	R	180k	1/8W	Carbon	AA
R121	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R122	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R123	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R124	VRS-CY1JF151J	R	150	1/16W	Metal Oxide	AA
R125	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R126	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R127	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R128	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R129	VRD-RA2EE120J	R	12	1/4W	Carbon	AA
R130	VRD-RA2EE120J	R	12	1/4W	Carbon	AA
R131	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R132	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R133	VRS-CY1JF153J	R	15k	1/16W	Metal Oxide	AA
R134	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R135	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R136	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R137	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R138	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA

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MAIN UNIT (Continued)

Ref. No.	Part No.	★			Description	Code
R143	VRD-RA2BE223J	R	22k	1/8W	Carbon	AA
R144	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R145	VRD-RA2BE223J	R	22k	1/8W	Carbon	AA
R146	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R147	VRS-CY1JF272J	R	2.7k	1/16W	Metal Oxide	AA
R148	VRS-CY1JF822J	R	8.2k	1/16W	Metal Oxide	AA
R149	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R150	VRD-RA2BE223J	R	22k	1/8W	Carbon	AA
R151	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R152	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R153	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R154	VRD-RA2BE473J	R	47k	1/8W	Carbon	AA
R155	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R156	VRD-RA2BE473J	R	47k	1/8W	Carbon	AA
R157	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R158	VRS-CY1JF273J	R	27k	1/16W	Metal Oxide	AA
R159	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R160	VRS-CY1JF100J	R	10	1/16W	Metal Oxide	AA
R161	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R162	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
⚠ R166	RR-XZ0026CEZZ	R	10	1/4W	Fuse Resistor	AB
R167	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R190	VRD-RA2BE395J	R	3.9M	1/8W	Carbon	AA
R201	VRS-CY1JF273J	R	27k	1/16W	Metal Oxide	AA
R202	VRS-CY1JF680J	R	68	1/16W	Metal Oxide	AA
R203	VRS-CY1JF680J	R	68	1/16W	Metal Oxide	AA
R204	VRS-CY1JF151J	R	150	1/16W	Metal Oxide	AA
R206	VRS-CY1JF680J	R	68	1/16W	Metal Oxide	AA
R211	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R212	VRS-CY1JF122J	R	1.2k	1/16W	Metal Oxide	AA
R213	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R214	VRS-CY1JF392J	R	3.9k	1/16W	Metal Oxide	AA
R215	VRS-CY1JF682J	R	6.8k	1/16W	Metal Oxide	AA
R216	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R217	VRD-RA2BE222J	R	2.2k	1/8W	Carbon	AA
R219	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R221	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R223	VRD-RA2BE273J	R	27k	1/8W	Carbon	AA
R225	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R227	VRS-CY1JF154J	R	150k	1/16W	Metal Oxide	AA
R228	VRD-RA2BE223J	R	22k	1/8W	Carbon	AA
R229	VRD-RA2BE184J	R	180k	1/8W	Carbon	AA
R230	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R231	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R232	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R233	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R234	VRS-CY1JF151J	R	150	1/16W	Metal Oxide	AA
R235	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R236	VRS-CY1JF221J	R	220	1/16W	Metal Oxide	AA
R237	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R238	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R239	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R240	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R241	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R242	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R243	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R244	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R245	VRS-CY1JF153J	R	15k	1/16W	Metal Oxide	AA
R246	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R247	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R248	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R249	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R250	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R255	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R256	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R257	VRS-CY1JF822J	R	8.2k	1/16W	Metal Oxide	AA
R258	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R259	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R260	VRS-CY1JF272J	R	2.7k	1/16W	Metal Oxide	AA
R261	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R262	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R263	VRS-CY1JF391J	R	390	1/16W	Metal Oxide	AA
R264	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R265	VRS-CY1JF331J	R	330	1/16W	Metal Oxide	AA
R266	VRS-CY1JF332J	R	3.3k	1/16W	Metal Oxide	AA
R267	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R268	VRS-CY1JF122J	R	1.2k	1/16W	Metal Oxide	AA
⚠ R270	RR-XZ0026CEZZ	R	10	1/4W	Fuse Resistor	AB
R271	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R272	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R273	VRS-CY1JF391J	R	390	1/16W	Metal Oxide	AA
R274	VRD-RA2EE102J	R	1k	1/4W	Carbon	AA
R275	VRS-CY1JF221J	R	220	1/16W	Metal Oxide	AA
R276	VRS-CY1JF221J	R	220	1/16W	Metal Oxide	AA
R277	VRS-CY1JF681J	R	680	1/16W	Metal Oxide	AA
R278	VRD-RA2EE120J	R	12	1/4W	Carbon	AA
R279	VRD-RA2EE120J	R	12	1/4W	Carbon	AA
R281	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R282	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R283	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R284	VRS-VV3DB123J	R	12k	2W	Metal Oxide	AA
R285	VRS-CY1JF683J	R	68k	1/16W	Metal Oxide	AA
R286	VRD-RA2BE683J	R	68k	1/8W	Carbon	AA
R288	VRS-CY1JF272J	R	2.7k	1/16W	Metal Oxide	AA
R289	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R290	VRS-CY1JF224J	R	220k	1/16W	Metal Oxide	AA
R296	VRS-CY1JF150J	R	15	1/16W	Metal Oxide	AA
R301	VRS-CY1JF221J	R	220	1/16W	Metal Oxide	AA
R303	VRD-RA2EE225J	R	2.2M	1/4W	Carbon	AA
R305	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R307	VRS-CY1JF333J	R	33k	1/16W	Metal Oxide	AA
R308	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R309	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R310	VRD-RA2BE333J	R	33k	1/8W	Carbon	AA
R311	VRS-CY1JF182J	R	1.8k	1/16W	Metal Oxide	AA
R312	VRD-RA2BE221J	R	220	1/8W	Carbon	AA
R317	VRS-CY1JF154J	R	150k	1/16W	Metal Oxide	AA
R318	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R319	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R320	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R321	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R322	VRD-RA2BE394J	R	390k	1/8W	Carbon	AA
R351	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R352	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R353	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R354	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R356	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R357	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R358	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R359	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R360	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R361	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R362	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R363	VRS-CY1JF564J	R	560k	1/16W	Metal Oxide	AA
R364	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R365	VRD-RA2BE564J	R	560k	1/8W	Carbon	AA
R366	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R367	VRS-CY1JF564J	R	560k	1/16W	Metal Oxide	AA
R368	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R369	VRS-CY1JF564J	R	560k	1/16W	Metal Oxide	AA
R370	VRS-CY1JF104J	R	100k	1/16W	Metal Oxide	AA
R371	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R372	VRD-RA2BE561J	R	560	1/8W	Carbon	AA
R373	VRS-CY1JF104J	R	100k	1/16W	Metal Oxide	AA
R374	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R375	VRD-RA2BE561J	R	560	1/8W	Carbon	AA
R376	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R377	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA

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Ref. No.	Part No.	★			Description	Code
R378	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R379	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R401	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R402	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R403	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R404	VRS-CY1JF821J	R	820	1/16W	Metal Oxide	AA
R405	VRS-CY1JF821J	R	820	1/16W	Metal Oxide	AA
R406	VRD-RA2EE471J	R	470	1/4W	Carbon	AA
R407	VRS-CY1JF121J	R	120	1/16W	Metal Oxide	AA
R408	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R409	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R418	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R420	VRS-CY1JF331J	R	330	1/16W	Metal Oxide	AA
R421	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R422	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R423	VRS-CY1JF392J	R	3.9k	1/16W	Metal Oxide	AA
R424	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R425	VRD-RA2BE563J	R	56k	1/8W	Carbon	AA
R426	VRS-CY1JF471J	R	470	1/16W	Metal Oxide	AA
R427	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R451	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R452	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R453	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R454	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R455	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R456	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R457	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R458	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R459	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R460	VRS-CY1JF123J	R	12k	1/16W	Metal Oxide	AA
R461	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R462	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R464	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R465	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R467	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R468	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R469	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R470	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R471	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R472	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R473	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R474	VRD-RA2EE750J	R	75	1/4W	Carbon	AA
R475	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R476	VRD-RM2HD221J	R	220	1/2W	Carbon	AA
R477	VRD-RA2EE750J	R	75	1/4W	Carbon	AA
R478	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R479	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R480	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R481	VRD-RA2EE750J	R	75	1/4W	Carbon	AA
R482	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R483	VRD-RA2EE750J	R	75	1/4W	Carbon	AA
R484	VRD-RA2BE100J	R	10	1/8W	Carbon	AA
R485	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R501	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R502	VRS-CY1JF333J	R	33k	1/16W	Metal Oxide	AA
R503	VRS-CY1JF333J	R	33k	1/16W	Metal Oxide	AA
R504	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA
R601	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA
R602	VRN-VV3LB4R7J	R	4.7	3W	Metal Film	
R605	VRD-RM2HD470J	R	47	1/2W	Carbon	
R606	VRD-RM2HD470J	R	47	1/2W	Carbon	
R609	VRS-CY1JF153J	R	15k	1/16W	Metal Oxide	AA
R610	VRS-CY1JF153J	R	15k	1/16W	Metal Oxide	AA
R612	VRD-RM2HD220J	R	22	1/2W	Carbon	AA
R613	VRD-RM2HD220J	R	22	1/2W	Carbon	AA
R614	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA
R615	VRN-VV3LB4R7J	R	4.7	3W	Metal Film	
R616	VRD-RM2HD560J	R	56	1/2W	Carbon	AA
R617	VRD-RM2HD560J	R	56	1/2W	Carbon	AA
R618	VRS-CY1JF684J	R	680k	1/16W	Metal Oxide	AA
R619	VRS-CY1JF682J	R	6.8k	1/16W	Metal Oxide	AA
R620	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA
R621	VRS-CY1JF271J	R	270	1/16W	Metal Oxide	AA
R622	VRS-CY1JF471J	R	470	1/16W	Metal Oxide	AA
R623	VRS-CY1JF184J	R	180k	1/16W	Metal Oxide	AA
R624	VRD-RA2EE471J	R	470	1/4W	Carbon	AA
R625	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R626	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R627	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R628	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R629	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R630	VRS-CY1JF394J	R	390k	1/16W	Metal Oxide	AA
R631	VRS-CY1JF182J	R	1.8k	1/16W	Metal Oxide	AA
R632	VRS-CY1JF471J	R	470	1/16W	Metal Oxide	AA
R633	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R634	VRD-RA2BE100J	R	10	1/8W	Carbon	AA
R635	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R636	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R637	VRD-RA2BE222J	R	2.2k	1/8W	Carbon	AA
R638	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R639	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R640	VRS-CY1JF153J	R	15k	1/16W	Metal Oxide	AA
R641	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R642	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R643	VRD-RM2HD560J	R	56	1/2W	Carbon	AA
R644	VRD-RM2HD560J	R	56	1/2W	Carbon	AA
R645	VRD-RA2BE682J	R	6.8k	1/8W	Carbon	AA
R646	VRD-RA2BE222J	R	2.2k	1/8W	Carbon	AA
R647	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R648	VRS-CY1JF682J	R	6.8k	1/16W	Metal Oxide	AA
R649	VRD-RM2HD560J	R	56	1/2W	Carbon	AA
R650	VRD-RM2HD560J	R	56	1/2W	Carbon	AA
R651	VRS-CY1JF105J	R	1M	1/16W	Metal Oxide	AA
R653	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R654	VRD-RM2HD271J	R	270	1/2W	Carbon	AA
R655	VRD-RM2HD121J	R	120	1/2W	Carbon	AA
R656	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R657	VRS-CY1JF152J	R	1.5k	1/16W	Metal Oxide	AA
R658	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R659	VRS-CY1JF152J	R	1.5k	1/16W	Metal Oxide	AA
R660	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R661	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R662	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R663	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R664	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R665	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R666	VRS-CY1JF182J	R	1.8k	1/16W	Metal Oxide	AA
R667	VRS-CY1JF182J	R	1.8k	1/16W	Metal Oxide	AA
R668	VRS-CY1JF182J	R	1.8k	1/16W	Metal Oxide	AA
R669	VRS-CY1JF182J	R	1.8k	1/16W	Metal Oxide	AA
R670	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R671	VRS-CY1JF182J	R	1.8k	1/16W	Metal Oxide	AA
R672	VRS-CY1JF682J	R	6.8k	1/16W	Metal Oxide	AA
R673	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R674	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R675	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R676	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R678	VRS-CY1JF182J	R	1.8k	1/16W	Metal Oxide	AA
R679	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R682	VRS-CY1JF152J	R	1.5k	1/16W	Metal Oxide	AA
R683	VRS-CY1JF271J	R	270	1/16W	Metal Oxide	AA
R684	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R686	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R690	VRD-RM2HD5R6J	R	5.6	1/2W	Carbon	AA
R691	VRN-VV3DB3R3J	R	3.3	2W	Metal Film	AB
R801	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R802	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA

PWB-A DUNTK9356WEW7 MAIN UNIT (Continued)

Ref. No.	Part No.	★			Description	Code
R803	VRS-CY1JF273J	R	27k	1/16W	Metal Oxide	AA
R804	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R805	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R806	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R807	VRS-CY1JF391J	R	390	1/16W	Metal Oxide	AA
R808	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R809	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R810	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R811	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R812	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R813	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R814	VRS-CY1JF333J	R	33k	1/16W	Metal Oxide	AA
R815	VRS-CY1JF221J	R	220	1/16W	Metal Oxide	AA
R816	VRS-CY1JF221J	R	220	1/16W	Metal Oxide	AA
R817	VRS-CY1JF221J	R	220	1/16W	Metal Oxide	AA
R818	VRS-CY1JF221J	R	220	1/16W	Metal Oxide	AA
R819	VRS-CY1JF221J	R	220	1/16W	Metal Oxide	AA
R820	VRS-CY1JF221J	R	220	1/16W	Metal Oxide	AA
R822	VRS-CY1JF153J	R	15k	1/16W	Metal Oxide	AA
R823	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R824	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R825	VRS-CY1JF471J	R	470	1/16W	Metal Oxide	AA
R826	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R827	VRS-CY1JF183J	R	18k	1/16W	Metal Oxide	AA
R828	VRS-CY1JF183J	R	18k	1/16W	Metal Oxide	AA
R829	VRS-CY1JF153J	R	15k	1/16W	Metal Oxide	AA
R830	VRS-CY1JF153J	R	15k	1/16W	Metal Oxide	AA
R831	VRD-RA2BE562J	R	5.6k	1/8W	Carbon	AA
R832	VRD-RA2BE562J	R	5.6k	1/8W	Carbon	AA
R833	VRS-CY1JF822J	R	8.2k	1/16W	Metal Oxide	AA
R834	VRS-CY1JF822J	R	8.2k	1/16W	Metal Oxide	AA
R835	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R836	VRS-CY1JF104J	R	100k	1/16W	Metal Oxide	AA
R837	VRS-CY1JF104J	R	100k	1/16W	Metal Oxide	AA
R838	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R839	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R840	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R841	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R842	VRD-RM2HD680J	R	68	1/2W	Carbon	AA
R843	VRD-RM2HD680J	R	68	1/2W	Carbon	AA
R844	VRD-RA2BE391J	R	390	1/8W	Carbon	AA
R846	VRS-CY1JF683J	R	68k	1/16W	Metal Oxide	AA
R847	VRD-RA2BE471J	R	470	1/8W	Carbon	AA
R848	VRS-CY1JF221J	R	220	1/16W	Metal Oxide	AA
R849	VRS-CY1JF182J	R	1.8k	1/16W	Metal Oxide	AA
R850	VRD-RA2BE221J	R	220	1/8W	Carbon	AA
R851	VRS-CY1JF182J	R	1.8k	1/16W	Metal Oxide	AA
R901	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R902	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R903	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R904	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R905	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R906	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R907	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R908	VRS-CY1JF475J	R	4.7M	1/16W	Metal Oxide	AA
R909	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R910	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R911	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R912	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R913	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R1001	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R1002	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R1003	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R1004	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R1005	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R1008	VRD-RA2BE563J	R	56k	1/8W	Carbon	AA
R1012	VRS-CY1JF563J	R	56k	1/16W	Metal Oxide	AA
R1026	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R1028	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R1030	VRD-RA2BE473J	R	47k	1/8W	Carbon	AA
R1031	VRS-CY1JF563J	R	56k	1/16W	Metal Oxide	AA
R1032	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R1033	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R1034	VRS-CY1JF563J	R	56k	1/16W	Metal Oxide	AA
R1035	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA
R1036	VRD-RA2BE562J	R	5.6k	1/8W	Carbon	AA
R1037	VRD-RA2BE562J	R	5.6k	1/8W	Carbon	AA
R1038	VRD-RA2BE562J	R	5.6k	1/8W	Carbon	AA
R1039	VRD-RA2BE562J	R	5.6k	1/8W	Carbon	AA
R1040	VRD-RA2BE562J	R	5.6k	1/8W	Carbon	AA
R1042	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R1043	VRS-CY1JF123J	R	12k	1/16W	Metal Oxide	AA
R1044	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R1046	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA
R1047	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA
R1048	VRS-CY1JF333J	R	33k	1/16W	Metal Oxide	AA
R1049	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R1055	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R1056	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R1057	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R1058	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R1059	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R1060	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R1061	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1062	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R1063	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1064	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1065	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1066	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1067	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1068	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA
R1070	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA
R1071	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1072	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R1073	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R1074	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R1075	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R1076	VRD-RA2BE562J	R	5.6k	1/8W	Carbon	AA
R1077	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R1078	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R1079	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R1080	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R1081	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R1082	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R1083	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R1084	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R1085	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R1086	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R1087	VRD-RA2BE333J	R	33k	1/8W	Carbon	AA
R1088	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA
R1089	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R1090	VRS-CY1JF332J	R	3.3k	1/16W	Metal Oxide	AA
R1091	VRS-CY1JF332J	R	3.3k	1/16W	Metal Oxide	AA
R1093	VRS-CY1JF273J	R	27k	1/16W	Metal Oxide	AA
R1094	VRS-CY1JF683J	R	68k	1/16W	Metal Oxide	AA
R1095	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R1096	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R1097	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R1098	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R1099	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R1100	VRS-CY1JF392J	R	3.9k	1/16W	Metal Oxide	AA
R1101	VRS-CY1JF272J	R	2.7k	1/16W	Metal Oxide	AA
R1102	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R1103	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1104	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R1105	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA
R1106	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code

PWB-A DUNTK9356WEW7 MAIN UNIT (Continued)

R1107	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R1108	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R1109	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R1110	VRD-RA2BE332J	R	3.3k	1/8W	Carbon	AA
R1111	VRD-RA2BE332J	R	3.3k	1/8W	Carbon	AA
R1112	VRD-RA2BE332J	R	3.3k	1/8W	Carbon	AA
R1113	VRS-CY1JF333J	R	33k	1/16W	Metal Oxide	AA
R1114	VRD-RA2BE562J	R	5.6k	1/8W	Carbon	AA
R1115	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R1116	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R1117	VRS-CY1JF563J	R	56k	1/16W	Metal Oxide	AA
R1119	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA
R1120	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA
R1121	VRS-CY1JF563J	R	56k	1/16W	Metal Oxide	AA
R1122	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R1123	VRS-CY1JF563J	R	56k	1/16W	Metal Oxide	AA
R1124	VRD-RA2BE223J	R	22k	1/8W	Carbon	AA
R1127	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA
R1129	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA
R1130	VRS-CY1JF563J	R	56k	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

CN101	QCNW-2158PEZZ	R	Connecting Cord	AH
CN201	QCNW-2157PEZZ	R	Connecting Cord	AH
J451	QTANJ0956CEZZ	R	Terminal	AT
P101	QPLGN0261CEZZ	R	Plug	AB
P201	QPLGN0261CEZZ	R	Plug	AB
P451	QPLGN0261CEZZ	R	Plug	AB
P601	QPLGN0261CEZZ	R	Plug	AB
P602	QPLGN0461CEZZ	R	Plug	AB
P801	QPLGN0561CEZZ	R	Plug	AB
P802	QPLGN0461CEZZ	R	Plug	AB
P1003	QPLGN0661CEZZ	R	Plug	AD
RDA601	PRDAR0255PEFW	R	Heat Sink	AE
RDA608	PRDAR0083PEFW	R	Heat Sink	AD
SC202	QSOCN0284FJZZ	R	Socket	AK
SC401	QSOCN0785CEZZ	R	Socket	AC
SC402	QSOCN0785CEZZ	R	Socket	AC
SC403	QSOCN0785CEZZ	R	Socket	AC
SC404	QSOCN0885CEZZ	R	Socket	AC
SC406	QSOCN0285FJZZ	R	Socket	AG
SC451	QSOCD0427CEZZ	R	Socket	AL
SC501	QSOCZ1138CEZZ	R	Socket	AE
SC601	QSOCZ1020CEZZ	R	Socket	AF
SC602	QSOCZ1938CEZZ	R	Socket	AF
SC1001	QSOCZ1138CEZZ	R	Socket	AE
SLD101	PSLDM0237PEFW	R	Shield	AD
SLD201	PSLDM0235PEFW	R	Shield	AD
SLD202	PSLDM0236PEFW	R	Shield	AC
SLD1001	PSLDM0211PEFW	R	Shield	AG
TP801	QLUGP0102PEZZ	R	Lug	AA
TP802	QLUGP0102PEZZ	R	Lug	AA
TP806	QLUGP0102PEZZ	R	Lug	AA

Ref. No.	Part No.	★	Description	Code

PWB-B DUNTK8776WEW9 CRT UNIT

TRANSISTORS

Q850	VS2SC4544LB1E	R	2SC4544LB	AD
Q851	VS2SC4544LB1E	R	2SC4544LB	AD
Q852	VS2SC4544LB1E	R	2SC4544LB	AD
Q853	VS2SC1815GW-1	R	2SC1815GW	AB
Q854	VS2SC1815GW-1	R	2SC1815GW	AB
Q855	VS2SC1815GW-1	R	2SC1815GW	AB
Q856	VS2SA1015Y/1E	R	2SA1015Y	AC
Q857	VS2SC1815GW-1	R	2SC1815GW	AB
Q858	VS2SA1015Y/1E	R	2SA1015Y	AC
Q1501	VS2SA1837//-1	R	2SA1837	AF
Q1502	VS2SC4793//-1	R	2SC4793	AF
Q1503	VS2SC1815YW-1	R	2SC1815YW	AC
Q1504	VS2SA1015Y/1E	R	2SA1015Y	AC
Q1506	VS2SC1815YW-1	R	2SC1815YW	AC
Q1507	VS2SA1015Y/1E	R	2SA1015Y	AC
Q1508	VS2SC1815YW-1	R	2SC1815YW	AC
Q1510	VS2SC1815YW-1	R	2SC1815YW	AC

DIODES

D850	VHD1SS119//1E	R	1SS119	AA
D851	VHD1SS119//1E	R	1SS119	AA
D852	VHD1SS119//1E	R	1SS119	AA
D853	VHD1SS119//1E	R	1SS119	AA
D854	VHD1SS119//1E	R	1SS119	AA
D855	VHD1SS119//1E	R	1SS119	AA
D856	VHD1SS119//1E	R	1SS119	AA
D857	RH-EX0619GEZZ	R	Zener Diode	AA
D858	VHD1SS119//1E	R	1SS119	AA
D859	VHD1SS119//1E	R	1SS119	AA
D860	VHD1SS119//1E	R	1SS119	AA
D861	VHD1SS119//1E	R	1SS119	AA
D1501	VHD1SS119//1E	R	1SS119	AA
D1502	VHD1SS119//1E	R	1SS119	AA
D1503	RH-DX0086TAZZ	R	Diode	AC
D1504	RH-DX0086TAZZ	R	Diode	AC
D1514	VHD1SS119//1E	R	1SS119	AA
D1515	VHD1SS119//1E	R	1SS119	AA
D1516	VHD1SS119//1E	R	1SS119	AA
D1522	VHD1SS119//1E	R	1SS119	AA

COILS

L854	VP-2K470K000K	R	Peaking	47µH	AB
L855	VP-2K470K000K	R	Peaking	47µH	AB
L856	VP-2K470K000K	R	Peaking	47µH	AB

CONTROL

R890	RVR-M4263CEZZ	R	330(B), SUB BRIGHT	AD

CAPACITORS

C850	VCEA0A2EW106M	R	10	250V	Electrolytic	AD
C851	RC-KZ0153CEZZ	R	0.001	3kV	Ceramic	AB
C853	VCKYD41HB561K	R	560p	50V	Ceramic	AA
C854	VCKYPA1HB331K	R	330p	50V	Ceramic	AA
C855	VCKYPA1HB102K	R	1000p	50V	Ceramic	AA
C856	VCKYPA1HB471K	R	470p	50V	Ceramic	AA
C857	VCKYD41HB471K	R	470p	50V	Ceramic	AA
C858	VCKYPA1HB471K	R	470p	50V	Ceramic	AA
C859	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C860	VCEAGA1CW476M	R	47	16V	Electrolytic	AB

PWB-B DUNTK8776WEW9
CRT UNIT (Continued)

Ref. No.	Part No.	★			Description	Code
C861	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C863	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C864	VCEAGA1CW226M	R	22	16V	Electrolytic	AB
C1501	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1502	VCKYPA2HB472K	R	4700p	500V	Ceramic	AB
C1503	VCKYPA2HB472K	R	4700p	500V	Ceramic	AB
C1504	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1505	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C1506	VCEAGA2CW106M	R	10	160V	Electrolytic	AC
C1507	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C1508	VCCSPA2HL560K	R	56p	500V	Ceramic	AA
C1509	VCEAGA2AW226M	R	22	100V	Electrolytic	AC
C1521	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1522	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1523	VCCSPA1HL221J	R	220p	50V	Ceramic	AA
C1524	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C1526	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C1528	VCEAGA1CW476M	R	47	16V	Electrolytic	AB
C1529	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA

RESISTERS

R850	VRC-MA2HG102K	R	1k	1/2W	Solid	AA
R851	VRC-MA2HG102K	R	1k	1/2W	Solid	AA
R852	VRC-MA2HG102K	R	1k	1/2W	Solid	AA
R853	VRS-VV3DB183J	R	18k	2W	Metal Oxide	AA
R854	VRS-VV3DB183J	R	18k	2W	Metal Oxide	AA
R855	VRS-VV3DB183J	R	18k	2W	Metal Oxide	AA
R856	VRS-VV3DB153J	R	15k	2W	Metal Oxide	AA
R857	VRS-VV3DB153J	R	15k	2W	Metal Oxide	AA
R858	VRS-VV3DB153J	R	15k	2W	Metal Oxide	AA
R859	VRC-MA2HG224K	R	220k	1/2W	Solid	AA
R860	VRD-RA2EE151J	R	150	1/4W	Carbon	AA
R861	VRD-RA2BE221J	R	220	1/8W	Carbon	AA
R862	VRD-RA2BE221J	R	220	1/8W	Carbon	AA
R863	VRD-RA2BE221J	R	220	1/8W	Carbon	AA
R864	VRD-RA2BE471J	R	470	1/8W	Carbon	AA
R865	VRD-RA2BE471J	R	470	1/8W	Carbon	AA
R866	VRD-RA2BE471J	R	470	1/8W	Carbon	AA
R867	VRD-RA2BE560J	R	56	1/8W	Carbon	AA
R868	VRD-RA2BE151J	R	150	1/8W	Carbon	AA
R869	VRD-RA2BE560J	R	56	1/8W	Carbon	AA
R870	VRD-RA2BE151J	R	150	1/8W	Carbon	AA
R871	VRD-RA2BE560J	R	56	1/8W	Carbon	AA
R872	VRD-RA2BE151J	R	150	1/8W	Carbon	AA
R873	VRD-RA2BE471J	R	470	1/8W	Carbon	AA
R874	VRD-RA2BE471J	R	470	1/8W	Carbon	AA
R875	VRD-RA2BE471J	R	470	1/8W	Carbon	AA
R876	VRD-RA2BE561J	R	560	1/8W	Carbon	AA
R877	VRD-RA2BE561J	R	560	1/8W	Carbon	AA
R878	VRD-RA2BE561J	R	560	1/8W	Carbon	AA
R879	VRD-RA2BE680J	R	68	1/8W	Carbon	AA
R880	VRD-RA2BE680J	R	68	1/8W	Carbon	AA
R881	VRD-RA2BE680J	R	68	1/8W	Carbon	AA
R882	VRD-RA2BE820J	R	82	1/8W	Carbon	AA
R883	VRD-RA2BE820J	R	82	1/8W	Carbon	AA
R884	VRD-RA2BE820J	R	82	1/8W	Carbon	AA
R887	VRD-RM2HD471J	R	470	1/2W	Carbon	AA
R888	VRD-RA2BE152J	R	1.5k	1/8W	Carbon	AA
R889	VRD-RA2BE681J	R	680	1/8W	Carbon	AA
R891	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R892	VRD-RA2BE223J	R	22k	1/8W	Carbon	AA
R893	VRD-RA2BE100J	R	10	1/8W	Carbon	AA
R894	VRD-RA2BE682J	R	6.8k	1/8W	Carbon	AA
R1502	VRD-RA2BE561J	R	560	1/8W	Carbon	AA
R1503	VRD-RA2EE560J	R	56	1/4W	Carbon	AA
R1504	VRD-RA2EE2R7J	R	2.7	1/4W	Carbon	AA
R1505	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1506	VRD-RA2BE100J	R	10	1/8W	Carbon	AA
R1507	VRD-RA2BE820J	R	82	1/8W	Carbon	AA
R1508	VRD-RA2BE683J	R	68k	1/8W	Carbon	AA
R1509	VRD-RA2BE123J	R	12k	1/8W	Carbon	AA
R1510	VRD-RM2HD121J	R	120	1/2W	Carbon	AA
R1511	VRD-RA2BE820J	R	82	1/8W	Carbon	AA
R1512	VRD-RA2BE683J	R	68k	1/8W	Carbon	AA
R1513	VRD-RA2BE561J	R	560	1/8W	Carbon	AA
R1514	VRD-RA2EE560J	R	56	1/4W	Carbon	AA
R1515	VRD-RA2EE2R7J	R	2.7	1/4W	Carbon	AA
R1516	VRS-VV3DB221J	R	220	2W	Metal Oxide	AA
R1531	VRD-RA2BE153J	R	15k	1/8W	Carbon	AA
R1532	VRD-RA2BE153J	R	15k	1/8W	Carbon	AA
R1533	VRD-RA2BE221J	R	220	1/8W	Carbon	AA
R1534	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R1536	VRD-RA2BE104J	R	100k	1/8W	Carbon	AA
R1537	VRD-RA2BE221J	R	220	1/8W	Carbon	AA
R1538	VRD-RA2BE221J	R	220	1/8W	Carbon	AA
R1539	VRD-RA2BE681J	R	680	1/8W	Carbon	AA
R1540	VRD-RA2BE104J	R	100k	1/8W	Carbon	AA
R1542	VRD-RA2BE223J	R	22k	1/8W	Carbon	AA
R1543	VRD-RA2BE681J	R	680	1/8W	Carbon	AA
R1544	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1545	VRD-RA2BE153J	R	15k	1/8W	Carbon	AA
R1546	VRD-RA2BE391J	R	390	1/8W	Carbon	AA
R1547	VRD-RA2BE151J	R	150	1/8W	Carbon	AA
R1549	VRD-RA2BE393J	R	39k	1/8W	Carbon	AA
R1550	VRD-RM2HD471J	R	470	1/2W	Carbon	AA

MISCELLANEOUS PARTS

CN850	QCNW-1885PEZZ	R	Connecting Cord	AG
CN851	QCNW-2170PEZZ	R	Connecting Cord	AG
CN852	QCNW-2169PEZZ	R	Connecting Cord	AH
CN1501	QCNW-2171PEZZ	R	Connecting Cord	AF
FB1501	RBLN-0020CEZZ	R	Balun	AB
P850	QPLGN0361CEZZ	R	Plug	AB
P851	QPLGN0561CEZZ	R	Plug	AB
P1501	QPLGN0261CEZZ	R	Plug	AB
RDA850	PRDAR0083PEFW	R	Heat Sink	AD
RDA851	PRDAR0083PEFW	R	Heat Sink	AD
RDA852	PRDAR0083PEFW	R	Heat Sink	AD
RDA1501	PRDAR0083PEFW	R	Heat Sink	AD
RDA1502	PRDAR0083PEFW	R	Heat Sink	AD
⚠ SC850	QSOCV0919CEZZ	R	CRT Socket	AH
SC851	QTIPM0083CEZZ	R	Tip	AB
SC852	QTIPM0083CEZZ	R	Tip	AB
SC853	QTIPM0083CEZZ	R	Tip	AB
SC1501	QSOCN0461CEZZ	R	Plug	AB

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POWER UNIT

INTEGRATED CIRCUITS

Ref. No.	Part No.	★	Description	Code
IC1301	VHiTA8256H/-1	R	I.C.	AU
IC1302	VHiAN5275//-1	R	I.C.	AP
IC1303	VHiAN7108//-1	R	I.C.	AL
IC1304	VHiUPC358C/-1	R	UPC358C	AD
IC1305	VHiUPC358C/-1	R	UPC358C	AD
IC1501	VHiTA8427K/-1	R	TA8427K	AL
IC1502	VHiTA8859CP-1	R	TA8859CP	AT
IC1701	VHiSTRM6821-1	R	I.C.	AZ
IC1703	VHiTOP209//-1	R	I.C.	AP
IC1750	VHiSE120N//-1	R	SE120N	AG
IC1751	VHiSi3121N/-1	R	I.C.	AL

TRANSISTORS

Ref. No.	Part No.	★	Description	Code
Q1211	VS2SA1015Y/1E	R	2SA1015Y	AC
Q1212	VS2SC1815GW-1	R	2SC1815GW	AB
Q1213	VS2SC1815GW-1	R	2SC1815GW	AB
Q1215	VS2SC1815GW-1	R	2SC1815GW	AB
Q1301	VSKRC102M//-1	R	KRC102M	AA
Q1302	VSKRC102M//-1	R	KRC102M	AA
Q1303	VS2SC1815GW-1	R	2SC1815GW	AB
Q1304	VSKRC102M//-1	R	KRC102M	AA
Q1305	VS2SC1815GW-1	R	2SC1815GW	AB
⚠ Q1601	VS2SD1887//1E	R	2SD1887	AN
Q1602	VS2SC2482//-1	R	2SC2482	AD
Q1603	VS2SD2045//-1	R	2SD2045	AL
Q1604	VS2SA1015Y/1E	R	2SA1015Y	AC
Q1605	VS2SA1015Y/1E	R	2SA1015Y	AC
Q1606	VS2SC1815GW-1	R	2SC1815GW	AB
Q1607	VS2SC1815GW-1	R	2SC1815GW	AB
Q1702	VS2SC1815YW-1	R	2SC1815GW	AB
Q1751	VS2SC1815GW-1	R	2SC1815GW	AB

DIODES

Ref. No.	Part No.	★	Description	Code
D1201	RH-PX0003PEZZ	R	Photo Diode	AF
D1202	RH-PX0274CEZZ	R	Photo Diode	AC
D1203	RH-PX0274CEZZ	R	Photo Diode	AC
D1204	RH-EX0613GEZZ	R	Zener Diode 5.1V	AA
D1205	RH-EX0631GEZZ	R	Zener Diode 9.1V	AA
D1206	RH-EX0623GEZZ	R	Zener Diode 7.5V	AA
D1259	VHD1SS119//1E	R	1SS119	AA
D1301	VHD1SS119//1E	R	1SS119	AA
D1302	VHD1SS119//1E	R	1SS119	AA
D1303	VHD1SS119//1E	R	1SS119	AA
D1306	VHD1SS119//1E	R	1SS119	AA
D1307	VHD1SS119//1E	R	1SS119	AA
D1501	RH-EX0619GEZZ	R	Zener Diode 6.2V	AA
D1502	RH-EX0619GEZZ	R	Zener Diode 6.2V	AA
D1503	RH-EX0619GEZZ	R	Zener Diode 6.2V	AA
D1504	RH-DX0279CEZZ	R	Diode	AB
D1505	RH-EX0619GEZZ	R	Zener Diode 6.2V	AA
D1506	VHD1SS119//1E	R	1SS119	AA
D1603	RH-DX0130CEZZ	R	Diode	AE
D1604	RH-DX0302CEZZ	R	Diode	AC
D1605	RH-DX0127CEZZ	R	Diode	AC
D1606	RH-EX0631GEZZ	R	Zener Diode 9.1V	AA
D1607	RH-EX0797CEZZ	R	Zener Diode 22V	AB
D1608	VHD1SS119//1E	R	1SS119	AA
D1611	RH-DX0446CEZZ	R	Diode	AB
D1612	RH-DX0446CEZZ	R	Diode	AB
D1613	RH-DX0279CEZZ	R	Diode	AB
D1615	RH-DX0452CEZZ	R	Diode	AH
D1616	RH-DX0449CEZZ	R	Diode	AK
D1703	RH-DX0130CEZZ	R	Diode	AE
D1704	RH-DX0130CEZZ	R	Diode	AE
D1705	RH-DX0321CEZZ	R	Diode	AC
D1706	RH-DX0279CEZZ	R	Diode	AB
D1707	RH-DX0279CEZZ	R	Diode	AB
D1708	RH-DX0279CEZZ	R	Diode	AB
D1709	RH-DX0279CEZZ	R	Diode	AB
D1710	RH-DX0130CEZZ	R	Diode	AE
D1711	RH-DX0321CEZZ	R	Diode	AC
D1750	RH-DX0355CEZZ	R	Diode	AF
D1751	RH-DX0486CEZZ	R	Diode	AH
D1752	RH-DX0398CEZZ	R	Diode	AG
D1754	RH-EX0152CEZZ	R	Zener Diode 180V	AE
D1756	RH-DX0130CEZZ	R	Diode	AE
D1757	VHD1SS119//1E	R	1SS119	AA
D1762	VHD1SS119//1E	R	1SS119	AA
⚠ IC1702	RH-FX0024CEZZ	R	PC113L	AG

PACKAGED CIRCUITS

Ref. No.	Part No.	★	Description	Code
PR1701	RMPTP0085CEZZ	R	Packaged Circuit	AL
⚠ VA1701	RH-VX0048CEZZ	R	Varistor	AE

COILS AND TRANSFORMERS

Ref. No.	Part No.	★	Description	Code
L1201	VP-DF3R3K0000	R	Peaking 3.3µH	AB
L1202	VP-DF3R3K0000	R	Peaking 3.3µH	AB
L1300	VP-DF100K0000	R	Peaking 10µH	AB
L1501	VP-CF331K0000	R	Peaking 330µH	AB
L1601	RCiLZ0822CEZZ	R	Coil	AL
L1602	RCiLZ0720CEZZ	R	Coil	AL
⚠ L1701	RCiLF0145CEZZ	R	Coil	AQ
L1750	RCiLP0292CEZZ	R	Coil	AE
L1751	RCiLP0171CEZZ	R	Coil	AD
L1752	RCiLP0178CEZZ	R	Coil	AD
L1753	RCiLP0268CEZZ	R	Coil	AE
⚠ T1601	RTRNF0153PEZZ	R	H-VOLT Transformer	AH
⚠ T1602	RTRNZ0057PEZZ	R	Transformer	AK
⚠ T1701	RTRNZ0121PEZZ	R	Transformer	AY
⚠ T1702	RTRNZ0537BMZZ	R	Transformer	AS

CONTROL

Ref. No.	Part No.	★	Description	Code
R1631	RVR-M4634GEZZ	R	220k(B), SUB CONT	AB

CAPACITORS

Ref. No.	Part No.	★				Code
C1024	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1217	VCEAGA0JW107M	R	100	6.3V	Electrolytic	AB
C1218	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1219	VCKYPA1HB102K	R	1000p	50V	Ceramic	AA
C1251	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C1301	VCQYTA1HM223J	R	0.022	50V	Mylar	AA
C1302	VCEAGA1HW335M	R	3.3	50V	Electrolytic	AB
C1304	VCFYFA1HA154J	R	0.15	50V	M.Polypro	AC
C1305	VCEAGA1VW477M	R	470	35V	Electrolytic	AD
C1306	VCQYTA1HM223J	R	0.022	50V	Mylar	AA
C1308	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1309	VCEAGA1VW108M	R	1000	35V	Electrolytic	AD
C1310	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1311	VCEAGA1VW477M	R	470	35V	Electrolytic	AD
C1312	VCFYFA1HA154J	R	0.15	50V	M.Polypro	AC
C1313	VCFYFA1HA184J	R	0.18	50V	M.Polypro	AC
C1314	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C1315	VCEAGA1HW225M	R	2.2	50V	Electrolytic	AB

PWB-C DUNTK9357WEW2 POWER UNIT (Continued)

Ref. No.	Part No.	★	Description			Code
C1316	VCEAGA0JW108M	R	1000	6.3V	Electrolytic	AC
C1317	VCQYTA1HM102J	R	1000p	50V	Mylar	AA
C1318	VCEAGA1CW226M	R	22	16V	Electrolytic	AB
C1319	VCEAGA1VW337M	R	330	35V	Electrolytic	AC
C1320	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1321	VCEA0A1VW477M	R	470	35V	Electrolytic	AB
C1322	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1323	VCEA0H1VW228M	R	2200	35V	Electrolytic	AH
C1324	VCKYPA1HB682K	R	6800p	50V	Ceramic	AA
C1325	VCKYPA1HB682K	R	6800p	50V	Ceramic	AA
C1327	VCFYSA1HB154J	R	0.15	50V	M.Polypro	AB
C1329	VCEAGA1AW107M	R	100	10V	Electrolytic	AB
C1330	VCFYSA1HB154J	R	0.15	50V	M.Polypro	AB
C1333	VCEAGA1CW476M	R	47	16V	Electrolytic	AB
C1334	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C1335	VCEAGA1AW227M	R	220	10V	Electrolytic	AB
C1336	VCEAGA0JW337M	R	330	6.3V	Electrolytic	AB
C1337	VCEAGA1AW227M	R	220	10V	Electrolytic	AB
C1338	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C1339	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1340	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1344	VCQYTA1HM183J	R	0.018	50V	Mylar	AB
C1345	VCQYTA1HM223J	R	0.022	50V	Mylar	AA
C1346	VCQYTA1HM103J	R	0.01	50V	Mylar	AA
C1347	VCQYTA1HM183J	R	0.018	50V	Mylar	AB
C1348	VCQYTA1HM223J	R	0.022	50V	Mylar	AA
C1349	VCQYTA1HM103J	R	0.01	50V	Mylar	AA
C1350	VCQYTA1HM103J	R	0.01	50V	Mylar	AA
C1351	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C1352	VCFYFA1HA474J	R	0.47	50V	M.Polypro	AC
C1353	VCFYFA1HA124J	R	0.12	50V	M.Polypro	AC
C1354	VCFYFA1HA224J	R	0.22	50V	M.Polypro	AB
C1355	VCQYTA1HM473J	R	0.047	50V	Mylar	AA
C1356	VCQYTA1HM103J	R	0.01	50V	Mylar	AA
C1357	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C1359	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C1361	VCQYTA1HM683J	R	0.068	50V	Mylar	AB
C1365	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1366	VCEAGA1HW105M	R	1	50V	Electrolytic	AC
C1370	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C1371	VCEAGA1EW475M	R	4.7	25V	Electrolytic	AA
C1372	VCEAGA1EW475M	R	4.7	25V	Electrolytic	AA
C1374	VCEAGA1HW226M	R	22	50V	Electrolytic	AB
C1502	VCEACA1HC225J	R	2.2	50V	Electrolytic	AC
C1503	VCEAGA1CW108M	R	1000	16V	Electrolytic	AD
C1504	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1505	VCEACA1HC224K	R	0.22	50V	Electrolytic	AC
C1506	VCEACA1HC225J	R	2.2	50V	Electrolytic	AC
C1507	VCQYTA1HM223J	R	0.022	50V	Mylar	AA
C1508	VCCSPA1HL221J	R	220p	50V	Ceramic	AA
C1509	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1510	VCEAGA1VW108M	R	1000	35V	Electrolytic	AD
C1511	VCEAGA1HW107M	R	100	50V	Electrolytic	AC
C1512	VCFYAA2AA224J	R	0.22	100V	M.Polypro	AD
C1513	VCQYTA1HM103J	R	0.01	50V	Mylar	AA
C1514	VCKYPA2HB391K	R	390p	500V	Ceramic	AA
C1515	VCQYTA1HM823J	R	0.082	50V	Mylar	AA
C1516	VCEAGA1VW108M	R	1000	35V	Electrolytic	AD
C1517	VCQYTA1HM683J	R	0.068	50V	Mylar	AB
C1518	VCEAGA1HW105M	R	1	50V	Electrolytic	AC
C1519	VCEACA1HC474K	R	0.47	50V	Electrolytic	AB
C1521	VCQYSA2AA473K	R	0.047	100V	Mylar	AC
C1601	VCKYPA2HB152K	R	1500p	500V	Ceramic	AA
C1602	VCKYPA2HB471K	R	470p	500V	Ceramic	AA
C1603	VCCCPA1HH101J	R	100p	50V	Ceramic	AA
C1604	VCFPPD2DB474J	R	0.47	200V	M.Polypro	AE
C1605	VCEAGA1HW106M	R	10	50V	Electrolytic	AC
C1606	VCKYPA2HB102K	R	1000p	500V	Ceramic	AA
C1607	VCEA0A2EW336M	R	33	250V	Electrolytic	AF
⚠ C1608	VCFPPD3CA822H	R	8200p	1600V	M.Polypro	AE
⚠ C1609	VCFPPD3CA822H	R	8200p	1600V	M.Polypro	AE
C1610	RC-KZ0338CEZZ	R	560p	2kV	Ceramic	AD
C1612	VCFPPC2DB364J	R	0.36	200V	M.Polypro	AF
C1613	VCFPPC2DB364J	R	0.36	200V	M.Polypro	AF
C1614	VCKYPA2HB561K	R	560p	500V	Ceramic	AA
⚠ C1615	VCQPSC2JA473K	R	0.047	630V	Mylar	AB
C1616	VCE9RH1HW475K	R	4.7	50V	Elect.(N.P)	AF
C1617	VCKYPA2HB102K	R	1000p	500V	Ceramic	AA
C1618	VCEA0H1VW228M	R	2200	35V	Electrolytic	AH
C1619	VCFYSB2EB224K	R	0.22	250V	M.Polypro	AD
C1620	VCKYPA2HB331K	R	330p	500V	Ceramic	AA
C1621	VCEAGA1HW105M	R	1	50V	Electrolytic	AC
C1623	VCFYFA1HA474J	R	0.47	50V	M.Polypro	AC
⚠ C1624	VCFPPC3CA332H	R	3300p	1600V	M.Polypro	AD
C1631	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1632	VCFYFA1HA334J	R	0.33	50V	M.Polypro	AB
⚠ C1701	RC-FZ017SCEZZ	R	0.22	AC250V	M.Polypro	AD
⚠ C1702	RC-FZ001SCEZZ	R	0.47	AC250V	M.Polypro	AG
C1704	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1705	VCKYPA1HB471K	R	470p	50V	Ceramic	AA
C1708	RC-EZ0689CEZZ	R	690	400V	Electrolytic	BA
C1709	VCEAGA1HW107M	R	100	50V	Electrolytic	AC
C1710	VCQPSC2JA333K	R	0.033	630V	Mylar	AB
C1711	RC-KZ0024CEZZ	R	1000p	2kV	Ceramic	AC
C1712	RC-KZ0073CEZZ	R	2200p	2kV	Ceramic	AD
C1714	RC-KZ0029CEZZ	R	0.01	250V	Ceramic	AC
C1715	RC-KZ0029CEZZ	R	0.01	250V	Ceramic	AC
C1716	RC-KZ0029CEZZ	R	0.01	250V	Ceramic	AC
C1717	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1718	VCEAGA1CW476M	R	47	16V	Electrolytic	AB
C1719	VCEA0A2GW475M	R	4.7	400V	Electrolytic	AE
C1720	RC-KZ0029CEZZ	R	0.01	250V	Ceramic	AC
C1721	VCKYPA2HB222K	R	2200p	500V	Ceramic	AA
C1722	RC-KZ0029CEZZ	R	0.01	250V	Ceramic	AC
⚠ C1723	RC-KZ017SCEZZ	R	680p	4kV	Ceramic	AG
C1724	VCFYSB2EB224K	R	0.22	250V	M.Polypro	AD
C1727	VCKYPA1HB101K	R	100p	50V	Ceramic	AA
C1750	VCKYPA2HB102K	R	1000p	500V	Ceramic	AA
C1751	RC-EZ0004PEZZ	R	2200	35V	Electrolytic	AH
C1753	RC-EZ0003PEZZ	R	1000	35V	Electrolytic	AF
C1754	VCKYPA2HB102K	R	1000p	500V	Ceramic	AA
C1755	RC-EZ0003PEZZ	R	1000	35V	Electrolytic	AF
C1756	RC-EZ0002PEZZ	R	1000	25V	Electrolytic	AE
C1757	VCKYPA2HB102K	R	1000p	500V	Ceramic	AA
C1758	RC-EZ0002PEZZ	R	1000	25V	Electrolytic	AE
C1759	RC-EZ0001PEZZ	R	680	25V	Electrolytic	AE
C1760	VCKYPA2HB102K	R	1000p	500V	Ceramic	AA
C1761	RC-EZ0005PEZZ	R	330	160V	Electrolytic	AM
C1762	RC-KZ0029CEZZ	R	0.01	250V	Ceramic	AC
C1763	RC-EZ0006PEZZ	R	2200	160V	Electrolytic	AK
C1765	VCKYPA1HB102K	R	1000p	50V	Ceramic	AA
C1767	VCEAGA1EW477M	R	470	25V	Electrolytic	AD
C1768	VCEA0A1CW477M	R	470	16V	Electrolytic	AC
C1769	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1774	RC-KZ0029CEZZ	R	0.01	250V	Ceramic	AC
C1780	VCKYPA1HB102K	R	1000p	50V	Ceramic	AA

RESISTORS

R1203	VRD-RA2BE273J	R	27k	1/8W	Carbon	AA
R1204	VRD-RA2BE822J	R	8.2k	1/8W	Carbon	AA
R1205	VRD-RA2BE472J	R	4.7k	1/8W	Carbon	AA
R1206	VRD-RA2BE222J	R	2.2k	1/8W	Carbon	AA
R1207	VRD-RM2HD561J	R	560	1/2W	Carbon	AA
R1209	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1210	VRD-RA2BE472J	R	4.7k	1/8W	Carbon	AA

PWB-C DUNTK9357WEW2 POWER UNIT (Continued)

Ref. No.	Part No.	★			Description	Code
R1211	VRD-RM2HD471J	R	470	1/2W	Carbon	AA
R1212	VRD-RA2BE472J	R	4.7k	1/8W	Carbon	AA
R1213	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1214	VRD-RA2BE332J	R	3.3k	1/8W	Carbon	AA
R1215	VRD-RA2BE472J	R	4.7k	1/8W	Carbon	AA
R1216	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1218	VRD-RA2BE152J	R	1.5k	1/8W	Carbon	AA
R1221	VRD-RA2BE472J	R	4.7k	1/8W	Carbon	AA
R1222	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1223	VRD-RM2HD681J	R	680	1/2W	Carbon	AA
R1224	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1225	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1226	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R1227	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R1230	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R1244	VRD-RA2EE750J	R	75	1/4W	Carbon	AA
R1301	VRD-RA2BE182J	R	1.8k	1/8W	Carbon	AA
R1302	VRD-RA2BE182J	R	1.8k	1/8W	Carbon	AA
⚠ R1303	VRG-RF2EB2R2J	R	2.2	1/4W	Fuse Resistor	AB
⚠ R1304	VRG-RF2EB2R2J	R	2.2	1/4W	Fuse Resistor	AB
R1305	VRD-RA2BE681J	R	680	1/8W	Carbon	AA
R1306	VRD-RA2BE681J	R	680	1/8W	Carbon	AA
R1307	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1308	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1309	VRD-RA2BE182J	R	1.8k	1/8W	Carbon	AA
R1311	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1312	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
⚠ R1313	VRG-RF2EB2R2J	R	2.2	1/4W	Fuse Resistor	AB
⚠ R1314	VRG-RF2EB2R2J	R	2.2	1/4W	Fuse Resistor	AB
R1315	VRD-RA2BE332J	R	3.3k	1/8W	Carbon	AA
R1316	VRD-RA2BE332J	R	3.3k	1/8W	Carbon	AA
R1319	VRD-RA2BE561J	R	560	1/8W	Carbon	AA
R1325	VRD-RA2BE123J	R	12k	1/8W	Carbon	AA
R1327	VRD-RA2BE223J	R	22k	1/8W	Carbon	AA
R1328	VRD-RA2BE223J	R	22k	1/8W	Carbon	AA
R1330	VRD-RA2BE123J	R	12k	1/8W	Carbon	AA
R1331	VRS-KT3LB180J	R	18	3W	Metal Oxide	AD
R1338	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1341	VRD-RA2BE123J	R	12k	1/8W	Carbon	AA
R1342	VRD-RA2BE123J	R	12k	1/8W	Carbon	AA
R1343	VRD-RA2BE274J	R	270k	1/8W	Carbon	AA
R1344	VRD-RA2BE274J	R	270k	1/8W	Carbon	AA
R1345	VRD-RA2BE153J	R	15k	1/8W	Carbon	AA
R1346	VRD-RA2BE333J	R	33k	1/8W	Carbon	AA
R1347	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1348	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1349	VRD-RA2BE153J	R	15k	1/8W	Carbon	AA
R1350	VRD-RA2BE153J	R	15k	1/8W	Carbon	AA
R1351	VRD-RA2BE333J	R	33k	1/8W	Carbon	AA
R1352	VRD-RA2BE153J	R	15k	1/8W	Carbon	AA
R1353	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1354	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1355	VRD-RA2BE182J	R	1.8k	1/8W	Carbon	AA
R1356	VRD-RA2BE183J	R	18k	1/8W	Carbon	AA
R1357	VRD-RA2BE123J	R	12k	1/8W	Carbon	AA
R1358	VRD-RA2BE822J	R	8.2k	1/8W	Carbon	AA
R1359	VRD-RA2BE123J	R	12k	1/8W	Carbon	AA
R1360	VRD-RA2BE123J	R	12k	1/8W	Carbon	AA
R1361	VRD-RA2BE272J	R	2.7k	1/8W	Carbon	AA
R1362	VRD-RA2BE562J	R	5.6k	1/8W	Carbon	AA
R1363	VRD-RA2BE223J	R	22k	1/8W	Carbon	AA
R1364	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R1365	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R1368	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1370	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1374	VRD-RA2BE822J	R	8.2k	1/8W	Carbon	AA
R1375	VRD-RA2BE183J	R	18k	1/8W	Carbon	AA
R1376	VRD-RA2BE183J	R	18k	1/8W	Carbon	AA
R1501	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1502	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1503	VRD-RM2HD391J	R	390	1/2W	Carbon	AA
R1504	VRD-RM2HD391J	R	390	1/2W	Carbon	AA
R1505	VRD-RA2EE123J	R	12k	1/4W	Carbon	AA
R1506	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
⚠ R1507	VRG-RF2EB220J	R	22	1/4W	Fuse Resistor	AB
R1508	VRD-RM2HD391J	R	390	1/2W	Carbon	AA
R1509	VRD-RA2BE124J	R	120k	1/8W	Carbon	AA
R1510	VRD-RA2BE683J	R	68k	1/8W	Carbon	AA
R1511	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R1512	VRD-RA2BE274J	R	270k	1/8W	Carbon	AA
R1513	VRD-RA2BE223J	R	22k	1/8W	Carbon	AA
R1514	VRD-RM2HD2R7J	R	2.7	1/2W	Carbon	AA
R1516	VRD-RM2HD2R7J	R	2.7	1/2W	Carbon	AA
R1517	VRD-RM2HD2R7J	R	2.7	1/2W	Carbon	AA
R1518	VRD-RA2BE223J	R	22k	1/8W	Carbon	AA
R1519	VRD-RA2BE221J	R	220	1/8W	Carbon	AA
R1520	VRD-RA2BE183J	R	18k	1/8W	Carbon	AA
R1601	VRS-KT3LB681J	R	680	3W	Metal Oxide	AC
R1602	VRS-KT3LB561J	R	560	3W	Metal Oxide	AE
R1603	VRS-VV3AB272J	R	2.7k	1W	Metal Oxide	AA
⚠ R1604	RR-XZ0029CEZZ	R	3.3	1/2W	Fuse Resistor	AB
R1606	VRD-RA2EE681J	R	680	1/4W	Carbon	AA
R1607	VRD-RA2EE681J	R	680	1/4W	Carbon	AA
R1608	VRD-RM2HD100J	R	10	1/2W	Carbon	AA
R1609	VRW-KQ41C3R3K	R	3.3	15W	Cement	AG
R1611	VRN-VV3LB2R2J	R	2.2	3W	Metal Film	AC
R1612	VRD-RA2EE101J	R	100	1/4W	Carbon	AA
R1613	VRD-RA2EE101J	R	100	1/4W	Carbon	AA
R1614	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1615	VRD-RM2HD102J	R	1k	1/2W	Carbon	AA
R1616	VRS-SU2HB102J	R	1k	1/2W	Metal Oxide	AA
R1617	VRD-RA2EE393J	R	39k	1/4W	Carbon	AA
R1618	VRD-RM2HD472J	R	4.7k	1/2W	Carbon	AA
R1619	VRD-RA2BE472J	R	4.7k	1/8W	Carbon	AA
R1620	VRD-RA2EE472J	R	4.7k	1/4W	Carbon	AA
R1621	VRD-RM2HD222J	R	2.2k	1/2W	Carbon	AA
R1622	VRN-VV3LB6R8J	R	6.8	3W	Metal Film	AC
R1623	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R1624	VRD-RA2BE153J	R	15k	1/8W	Carbon	AA
R1625	VRD-RA2BE273J	R	27k	1/8W	Carbon	AA
R1626	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1627	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1628	VRD-RA2BE224J	R	220k	1/8W	Carbon	AA
R1629	VRS-VV3DB561J	R	560	2W	Metal Oxide	AA
R1630	VRD-RA2BE472J	R	4.7k	1/8W	Carbon	AA
R1632	VRD-RA2EE274J	R	270k	1/4W	Carbon	AA
R1633	VRD-RA2EE684J	R	680k	1/4W	Carbon	AA
R1634	VRD-RA2EE334J	R	330k	1/4W	Carbon	AA
R1635	VRD-RA2EE564J	R	560k	1/4W	Carbon	AA
R1636	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1637	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1638	VRD-RA2BE560J	R	56	1/8W	Carbon	AA
R1639	VRD-RA2BE153J	R	15k	1/8W	Carbon	AA
R1640	VRD-RA2BE124J	R	120k	1/8W	Carbon	AA
R1641	VRD-RA2BE223J	R	22k	1/8W	Carbon	AA
R1642	VRD-RA2BE124J	R	120k	1/8W	Carbon	AA
R1643	VRD-RA2BE123J	R	12k	1/8W	Carbon	AA
R1644	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1645	VRD-RA2BE124J	R	120k	1/8W	Carbon	AA
R1646	VRD-RA2EE125J	R	1.2M	1/4W	Carbon	AA
R1648	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1650	VRN-VV3AB2R2J	R	2.2	1W	Metal Film	AA
⚠ R1701	VRC-UA2HG395K	R	3.9M	1/2W	Solid	AA
R1704	VRW-KQ41CR82K	R	0.82	15W	Cement	AF
R1705	VRW-KQ41CR82K	R	0.82	15W	Cement	AF
R1706	VRS-KT3LB822J	R	8.2k	3W	Metal Oxide	AC
R1708	VRD-RA2BE472J	R	4.7k	1/8W	Carbon	AA

PWB-C DUNTK9357WEW2 POWER UNIT (Continued)

Ref. No.	Part No.	★	Description			Code
R1709	RR-WZ0170CEZZ	R	0.18	3W	Fuse Resistor	AE
R1710	RR-WZ0170CEZZ	R	0.18	3W	Fuse Resistor	AE
R1711	VRD-RA2BE122J	R	1.2k	1/8W	Carbon	AA
R1712	VRD-RA2BE122J	R	1.2k	1/8W	Carbon	AA
R1713	VRS-VV3DB100J	R	10	2W	Metal Oxide	AA
R1714	VRD-RM2HD332J	R	3.3k	1/2W	Carbon	AA
R1715	VRS-KT3LB823J	R	82k	3W	Metal Oxide	AC
R1716	VRW-KP3HC100J	R	10	5W	Cement	AD
R1717	VRD-RM2HD220J	R	22	1/2W	Carbon	AA
R1718	VRD-RM2HD104J	R	100k	1/2W	Carbon	AA
⚠ R1719	VRC-UA2HG825K	R	8.2M	1/2W	Solid	AA
⚠ R1720	VRC-UA2HG825K	R	8.2M	1/2W	Solid	AA
R1721	VRD-RM2HD391J	R	390	1/2W	Carbon	AA
R1726	VRS-KT3LB682J	R	6.8k	3W	Metal Oxide	AC
R1728	VRS-VV3LB220J	R	22	3W	Metal Oxide	AB
R1729	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1751	VRD-RA2BE273J	R	27k	1/8W	Carbon	AA
R1753	VRD-RA2BE332J	R	3.3k	1/8W	Carbon	AA
R1754	VRD-RA2BE472J	R	4.7k	1/8W	Carbon	AA
R1756	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1757	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1759	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R1761	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA

MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
⚠ F1701	QFS-C5022CEZZ	R	Fuse, T5A 250V	AD
FB1501	RBLN-0037CEZZ	R	Balun	AB
FB1601	RBLN-0037CEZZ	R	Balun	AB
FB1602	RBLN-0037CEZZ	R	Balun	AB
FB1603	RBLN-0037CEZZ	R	Balun	AB
FB1702	RBLN-0037CEZZ	R	Balun	AB
FB1703	RBLN-0037CEZZ	R	Balun	AB
FB1750	RBLN-0037CEZZ	R	Balun	AB
FB1751	RBLN-0037CEZZ	R	Balun	AB
FB1752	RBLN-0037CEZZ	R	Balun	AB
FB1753	RBLN-0037CEZZ	R	Balun	AB
FB1754	RBLN-0037CEZZ	R	Balun	AB
FB1755	RBLN-0037CEZZ	R	Balun	AB
FB1757	RBLN-0037CEZZ	R	Balun	AB
FB1759	RBLN-0037CEZZ	R	Balun	AB
⚠ FH1701	QFSHD1013CEZZ	R	Fuse Holder	AC
⚠ FH1702	QFSHD1014CEZZ	R	Fuse Holder	AC
J1201	QJAKE0144CEZZ	R	Jack	AF
J1202	QJAKE0145CEZZ	R	Jack	AF
J1203	QJAKE0143CEZZ	R	Jack	AG
J1301	QJAKJ0047CEZZ	R	Jack	AD
P1201	QPLGZ1138CEZZ	R	Plug	AE
P1202	QPLGN0261CEZZ	R	Plug	AB
P1301	QPLGN0461CEZZ	R	Plug	AB
P1302	QPLGN0361CEZZ	R	Plug	AB
P1303	QPLGN0261CEZZ	R	Plug	AB
P1304	QPLGZ1938CEZZ	R	Plug	AF
P1305	QPLGN0361CEZZ	R	Plug	AB
P1501	QPLGZ1138CEZZ	R	Plug	AE
P1601	QPLGN0160FJZZ	R	Plug	AD
P1602	QPLGN0361CEZZ	R	Plug	AB
⚠ P1701	QPLGN0269GEZZ	R	Plug	AB
P1702	QPLGN0469GEZZ	R	Plug	AE
P1704	QPLGN0207CEZZ	R	Plug	AA
P1705	QPLGZ1019CEZZ	R	Plug	AG
RDA1301	PRDAR0262PEFW	R	Heat Sink	AQ
RDA1302	PRDAR0189PEFW	R	Heat Sink	AE
RDA1501	PRDAR0213PEFW	R	Heat Sink	AM
RDA1601	PRDAR0252PEFW	R	Heat Sink	AL
RDA1602	PRDAR0224PEFW	R	Heat Sink	AF
RDA1701	PRDAR0220PEFW	R	Heat Sink	AR
RDA1750	PRDAR0160PEFW	R	Heat Sink	AF
RDA1751	PRDAR0135PEFW	R	Heat Sink	
RDA1752	PRDAR0261PEFW	R	Heat Sink	
RMC1201	RRMCU0222CEZZ	R	Remote Receiver	AL
⚠ RY1701	RRLYJ0046CEZZ	R	Relay	AL
S1201	QSW-K0079GEZZ	R	Switch	AB
S1202	QSW-K0079GEZZ	R	Switch	AB
S1203	QSW-K0079GEZZ	R	Switch	AB
S1204	QSW-K0079GEZZ	R	Switch	AB
S1205	QSW-K0079GEZZ	R	Switch	AB
⚠ S1701	QSW-P0588CEZZ	R	Switch	AP
SC1601	QTIPM0083CEZZ	R	Tip	AB
SLD1301	PSLDM0146PEFW	R	Shield	AE

PWB-D DUNTK9358WEV0
DIG. UNIT

INTEGRATED CIRCUITS

Ref. No.	Part No.	★	Description	Code
IC5461	VHiTC9090AN-1	R	TC9090AN	BC

TRANSISTORS

Ref. No.	Part No.	★	Description	Code
Q5461	VS2SD601A//-1	R	2SD601A	AC
Q5462	VS2SB709A//-1	R	2SB709A	AA
Q5463	VS2SD601A//-1	R	2SD601A	AC
Q5464	VS2SD601A//-1	R	2SD601A	AC
Q5465	VS2SD601A//-1	R	2SD601A	AC
Q5466	VS2SB709A//-1	R	2SB709A	AA
Q5467	VS2SD601A//-1	R	2SD601A	AC
Q5861	VS2SD601A//-1	R	2SD601A	AC
Q5862	VS2SD601A//-1	R	2SD601A	AC
Q5863	VS2SB709A//-1	R	2SB709	AA
Q5864	VS2SD601A//-1	R	2SD601A	AC

DIODES

Ref. No.	Part No.	★	Description	Code
D5461	RH-EX0619GEZZ	R	Zener Diode	AA
D5462	RH-EX0619GEZZ	R	Zener Diode	AA
D5463	VHD1SS119//-1	R	1SS119	AA

COILS

Ref. No.	Part No.	★	Description		Code
L5461	VP-DF100K0000	R	Peaking	10µH	AB
L5462	VP-DF100K0000	R	Peaking	10µH	AB
L5463	VP-DF101K0000	R	Peaking	100µH	AB
L5464	VP-DF101K0000	R	Peaking	100µH	AB
L5465	VP-XF330K0000	R	Peaking	33µH	AB
L5466	VP-XF330K0000	R	Peaking	33µH	AB
L5467	VP-DF101K0000	R	Peaking	100µH	AB
L5468	VP-DF101K0000	R	Peaking	100µH	AB
L5469	VP-DF101K0000	R	Peaking	100µH	AB
L5471	VP-DF101K0000	R	Peaking	100µH	AB
L5472	VP-XF470K0000	R	Peaking	47µH	AB
L5473	VP-XF470K0000	R	Peaking	47µH	AB
L5861	VP-XF6R8K0000	R	Peaking	6.8µH	AB
L5862	VP-XF100K0000	R	Peaking	10µH	AB
L5863	VP-DF101K0000	R	Peaking	100µH	AB

CONTROL

Ref. No.	Part No.	★	Description	Code
R5467	RVR-M4619GEZZ	R	680(B), VIDEO LEVEL	AB

CAPACITORS

Ref. No.	Part No.	★				Code
C5405	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C5460	VCEAGA0JW477M	R	470	6.3V	Electrolytic	AB
C5461	VCEAGA0JW477M	R	470	6.3V	Electrolytic	AB
C5462	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5463	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C5464	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5465	VCCCCY1HH150J	R	15p	50V	Ceramic	AA
C5466	VCCCCY1HH560J	R	56p	50V	Ceramic	AA
C5467	VCCCCY1HH150J	R	15p	50V	Ceramic	AA
C5468	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C5469	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C5470	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5471	VCEAGA1HW474M	R	0.47	50V	Electrolytic	AA
C5472	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5473	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5474	VCEAGA0JW477M	R	470	6.3V	Electrolytic	AB
C5475	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5476	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5477	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5478	VCEAGA0JW477M	R	470	6.3V	Electrolytic	AB
C5479	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5480	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5481	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5482	VCCCCY1HH181J	R	180p	50V	Ceramic	AA
C5483	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5484	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5485	VCCCCY1HH121J	R	120p	50V	Ceramic	AA
C5486	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5487	VCEAGA0JW477M	R	470	6.3V	Electrolytic	AB
C5488	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5489	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C5490	VCCCCY1HH560J	R	56p	50V	Ceramic	AA
C5491	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C5492	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C5493	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5494	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C5861	VCCCCY1HH270J	R	27p	50V	Ceramic	AA
C5863	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C5864	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5865	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C5866	VCCCCY1HH560J	R	56p	50V	Ceramic	AA

RESISTORS

Ref. No.	Part No.	★				Code
R5455	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R5461	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R5462	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R5463	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R5464	VRS-CY1JF333J	R	33k	1/16W	Metal Oxide	AA
R5465	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R5466	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R5468	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R5469	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R5470	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R5471	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R5472	VRS-CY1JF822J	R	8.2k	1/16W	Metal Oxide	AA
R5473	VRS-CY1JF123J	R	12k	1/16W	Metal Oxide	AA
R5474	VRD-RA2BE821J	R	820	1/8W	Carbon	AA
R5475	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R5476	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R5477	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R5478	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R5479	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R5480	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R5481	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R5482	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R5483	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R5484	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R5485	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R5486	VRS-CY1JF821J	R	820	1/16W	Metal Oxide	AA
R5861	VRD-RA2BE821J	R	820	1/8W	Carbon	AA
R5862	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R5864	VRS-CY1JF123J	R	12k	1/16W	Metal Oxide	AA
R5865	VRS-CY1JF332J	R	3.3k	1/16W	Metal Oxide	AA
R5866	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R5867	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R5868	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R5869	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R5870	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
P5450	QPLGN0785CEZZ	R	Plug	AC
P5451	QPLGN0785CEZZ	R	Plug	AC
SLD5451	PSLDM0212PEFW	R	Shield	AE
SLD5452	PSLDM0213PEFW	R	Shield	AD

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INTEGRATED CIRCUITS

Ref. No.	Part No.	★	Description	Code
IC2300	VHiTDA9813T-1	R	TDA9813T	AY
IC2302	VHiTDA9840T-1	R	TDA9840T	AS
IC2303	VHiSAA7283G-1	R	SAA7283G	BC

TRANSISTORS

Ref. No.	Part No.	★	Description	Code
Q2300	VS2SC2735//1E	R	2SC2735	AC
Q2301	VS2SA950-Y/1E	R	2SA950-Y	AD
Q2302	VSDTC124EK/-1	R	DTC124EK	AB
Q2305	VS2SD601A//-1	R	2SD601A	AC
Q2306	VS2SC2735//1E	R	2SC2735	AC

DIODES

Ref. No.	Part No.	★	Description	Code
D2300	VHD1SS119//-1	R	1SS119	AB
D2301	VHDOF4076//-1	R	OF4076	AC
D2303	RH-EX0619GEZZ	R	Zener Diode	AA
D2304	RH-EX0619GEZZ	R	Zener Diode	AA
D2305	RH-EX1222CEZZ	R	Zener Diode	AE

PACKAGED CIRCUITS

Ref. No.	Part No.	★	Description	Code
X2300	RCRSB0183GEZZ	R	Crystal	AM
X2301	RCRSB0174GEZZ	R	Crystal	AF

COILS AND TRANSFORMERS

Ref. No.	Part No.	★	Description	Code
CF2300	RFilC0063CEZZ	R	Ceramic Filter	AG
CF2301	RFilC0061CEZZ	R	CeramicFilter	AF
L2300	VP-XF6R8K0000	R	Peaking 6.8µH	AB
L2301	VP-XF6R8K0000	R	Peaking 6.8µH	AB
L2302	VP-XF6R8K0000	R	Peaking 6.8µH	AB
L2303	VP-XF6R8K0000	R	Peaking 6.8µH	AB
L2304	VP-XF6R8K0000	R	Peaking 6.8µH	AB
L2305	VP-XF6R8K0000	R	Peaking 6.8µH	AB
L2306	VP-XF1R2K0000	R	Peaking 1.2µH	AB
SF2300	RFilC0016PEZZ	R	Surface Acoustic Wave Filter	AS
T2301	RCilI0489CEZZ	R	IF Coil	AE
T2302	RCilD0231CEZZ	R	Detection Coil	AF

CONTROLS

Ref. No.	Part No.	★	Description	Code
R2339	RVR-M4624GEZZ	R	4.7k(B) SEPARATION	AB
R2371	RVR-M4624GEZZ	R	4.7k(B) AUDIO LEVEL	AB

CAPACITORS

Ref. No.	Part No.	★			Description	Code
C2300	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2301	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2302	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2303	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2304	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2305	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2306	VCEAGA1CW476M	R	47	16V	Electrolytic	AB
C2312	VCEAGA1HW225M	R	2.2	50V	Electrolytic	AB
C2313	VCEAGA1HW224M	R	0.22	50V	Electrolytic	AA
C2314	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2315	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2316	VCKYCY1HB391K	R	390p	50V	Ceramic	AA
C2317	VCCCCY1HH100D	R	10p	50V	Ceramic	AA
C2318	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C2319	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C2320	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C2321	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2322	VCEAGA0JW476M	R	47	6.3V	Electrolytic	AB
C2323	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C2324	VCQYTA1HM473J	R	0.047	50V	Mylar	AA
C2325	VCE9GA1HW105M	R	1	50V	Elect.(N.P)	AB
C2326	VCE9GA1CW106M	R	10	16V	Elect.(N.P)	AB
C2327	VCEAGA0JW476M	R	47	6.3V	Electrolytic	AB
C2328	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C2329	VCE9GA1CW106M	R	10	16V	Elect.(N.P)	AB
C2330	VCE9GA1HW105M	R	1	50V	Elect.(N.P)	AB
C2331	VCEAGA0JW476M	R	47	6.3V	Electrolytic	AB
C2332	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C2333	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C2334	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2335	VCEAGA1HW474M	R	0.47	50V	Electrolytic	AA
C2336	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2337	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C2338	VCCCCY1HH101J	R	100p	50V	Ceramic	AA
C2339	VCCCCY1HH101J	R	100p	50V	Ceramic	AA
C2340	VCQYTA1HM223J	R	0.022	50V	Mylar	AA
C2341	VCEAGA1HW334M	R	0.33	50V	Electrolytic	AA
C2342	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2343	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C2344	VCEAGA1HW105M	R	1	50V	Electrolytic	AC
C2345	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C2346	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C2347	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C2348	VCKYCY1HB221K	R	220p	50V	Ceramic	AA
C2349	VCEAGA1AW336M	R	33	10V	Electrolytic	AA
C2353	VCEAGA1HW225M	R	2.2	50V	Electrolytic	AB
C2358	VCE9GA1CW106M	R	10	16V	Elect.(N.P)	AB
C2361	VCE9GA1CW106M	R	10	16V	Elect.(N.P)	AB
C2362	VCCCCY1HH470J	R	47p	50V	Ceramic	AA
C2363	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C2364	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2365	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C2366	VCEAGA0JW227M	R	220	6.3V	Electrolytic	AB
C2369	VCQYTA1HM103J	R	0.01	50V	Mylar	AA
C2370	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2371	VCEAGA0JW476M	R	47	6.3V	Electrolytic	AB
C2372	VCQYTA1HM103J	R	0.01	50V	Mylar	AA
C2373	VCCCCY1HH100D	R	10p	50V	Ceramic	AA
C2376	VCCCCY1HH100D	R	10p	50V	Ceramic	AA
C2377	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2378	VCEAGA1CW477M	R	470	16V	Electrolytic	AC
C2379	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2381	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C2386	VCE9GA1CW226M	R	22	16V	Elect.(N.P)	AB
C2387	VCE9GA1CW226M	R	22	16V	Elect.(N.P)	AB
C2392	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C2393	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2394	VCEAGA1HW225M	R	2.2	50V	Electrolytic	AB
C2395	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2397	VCEAGA1CW226M	R	22	16V	Electrolytic	AB
C2398	VCEAGA1CW226M	R	22	16V	Electrolytic	AB
C2400	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2401	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C2402	VCCCCY1HH100D	R	10p	50V	Ceramic	AA
C2403	VCCCCY1HH100D	R	10p	50V	Ceramic	AA
C2404	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA

RESISTORS

Ref. No.	Part No.	★			Description	Code
R2300	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R2302	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R2303	VRS-CY1JF470J	R	47	1/16W	Metal Oxide	AA
R2305	VRD-RA2BE682J	R	6.8k	1/8W	Carbon	AA
R2306	VRS-CY1JF182J	R	1.8k	1/16W	Metal Oxide	AA
R2309	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R2310	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R2311	VRS-CY1JF181J	R	180	1/16W	Metal Oxide	AA
R2313	VRS-CY1JF153J	R	15k	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code

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R2314	VRS-CY1JF392J	R	3.9k	1/16W	Metal Oxide	AA
R2315	VRS-CY1JF331J	R	330	1/16W	Metal Oxide	AA
R2316	VRS-CY1JF100J	R	10	1/16W	Metal Oxide	AA
R2317	VRS-CY1JF151J	R	150	1/16W	Metal Oxide	AA
R2318	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R2319	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R2320	VRD-RA2BE333J	R	33k	1/8W	Carbon	AA
R2321	VRS-CY1JF182J	R	1.8k	1/16W	Metal Oxide	AA
R2322	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R2323	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R2324	VRS-CY1JF684J	R	680k	1/16W	Metal Oxide	AA
R2325	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R2326	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R2327	VRS-CY1JF152J	R	1.5k	1/16W	Metal Oxide	AA
R2334	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R2341	VRS-CY1JF392J	R	3.9k	1/16W	Metal Oxide	AA
R2344	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R2345	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R2350	VRS-CY1JF105J	R	1 M	1/16W	Metal Oxide	AA
R2351	VRS-CY1JF333J	R	33k	1/16W	Metal Oxide	AA
R2352	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R2353	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R2362	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA
R2363	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA
R2370	VRS-CY1JF392J	R	3.9k	1/16W	Metal Oxide	AA
R2374	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R2380	VRS-CY1JF392J	R	3.9k	1/16W	Metal Oxide	AA
R2384	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R2385	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R2386	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

P2300	QPLGN0274FJZZ	R	Plug	AE
SLD2301	PSLDM0212PEFW	R	Shield	AE
SLD2302	PSLDM0213PEFW	R	Shield	AD
TP2303	QLUGP0102PEZZ	R	Lug	AA

Ref. No.	Part No.	★	Description	Code

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INTEGRATED CIRCUITS

IC4900	VHiTDA9141/-1	R	TDA9141	BB
IC4901	VHiSDA9288X-1	R	SDA9288X	BH
IC4902	VHiTDA8443A-1	R	TDA8443A	AX
IC4903	VHiTDA4665/4E	R	TDA4665	AT
IC4904	VHiBA7655A/-1	R	BA7655A	AG
IC4905	VHiKA7808PI-1	R	KIA7808PI	AF
IC4906	VHiKA7805PI-1	R	KIA7805PI	AE

TRANSISTORS

Q4900	VS2SD601A//-1	R	2SD601A	AC
Q4901	VS2SD601A//-1	R	2SD601A	AC
Q4902	VS2SD601A//-1	R	2SD601A	AC
Q4903	VS2SD601A//-1	R	2SD601A	AC

DIODES

D4900	VHD1SS119//1E	R	1SS119	AA
D4901	VHD1SS119//1E	R	1SS119	AA
D4902	VHD1SS119//1E	R	1SS119	AA
D4903	VHD1SS119//1E	R	1SS119	AA
D4904	VHD1SS119//1E	R	1SS119	AA
D4905	VHD1SS119//1E	R	1SS119	AA
D4906	VHD1SS119//1E	R	1SS119	AA
D4907	RH-EX0619GEZZ	R	Zener Diode	AA
D4908	VHD1SS119//1E	R	1SS119	AA

PACKAGED CIRCUITS

X4900	RCRSB0008PEZZ	R	Crystal	AH
X4901	RCRSB0009PEZZ	R	Crystal	AL
X4902	RCRSB0212GEZZ	R	Crystal	AK

COILS

L4900	VP-DF220K0000	R	Peaking	22µH	AB
L4901	VP-DF220K0000	R	Peaking	22µH	AB
L4902	VP-OF220K0000	R	Peaking	22µH	AC
L4903	VP-DF120K0000	R	Peaking	12µH	AB
L4904	VP-DF120K0000	R	Peaking	12µH	AB

CONTROLS

R4938	RVR-M4269CEZZ	R	3.3k, P in P. Y-LEVEL	AC
R4952	RVR-M4270CEZZ	R	4.7k(B), P in P. U/V LEVEL	AC

CAPACITORS

C4900	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C4901	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C4902	VCEAGA1CW476M	R	47	16V	Electrolytic	AB
C4903	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4904	VCCCCY1HH330J	R	33p	50V	Ceramic	AA
C4905	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4906	VCCCCY1HH180J	R	18p	50V	Ceramic	AA
C4907	VCCCCY1HH180J	R	18p	50V	Ceramic	AA
C4908	VCQYTA1HM223J	R	0.022	50V	Mylar	AA
C4909	VCQYTA1HM472J	R	4700p	50V	Mylar	AB

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P IN P. UNIT (Continued)

Ref. No.	Part No.	★			Description	Code
C4910	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4911	VCFYFA1HA224J	R	0.22	50V	M.Polypro	AB
C4912	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C4913	VCEAGA1HW105M	R	1	50V	Electrolytic	AC
C4914	VCQYTA1HM332J	R	3300p	50V	Mylar	AA
C4915	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C4916	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C4917	VCEAGA1HW105M	R	1	50V	Electrolytic	AC
C4918	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C4919	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C4920	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C4921	VCEAGA1CW226M	R	22	16V	Electrolytic	AB
C4922	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4923	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4924	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4925	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4926	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C4927	VCQYTA1HM103J	R	0.01	50V	Mylar	AA
C4928	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C4929	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4930	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4931	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4932	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C4933	VCEAGA1CW226M	R	22	16V	Electrolytic	AB
C4934	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C4935	VCEAGA1CW107M	R	100	16V	Electrolytic	AB
C4936	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C4937	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C4938	VCQYTA1HM103J	R	0.01	50V	Mylar	AA
C4939	VCEAGA1CW226M	R	22	16V	Electrolytic	AB
C4940	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4941	VCQYTA1HM103J	R	0.01	50V	Mylar	AA
C4942	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4943	VCEAGA1CW476M	R	47	16V	Electrolytic	AB
C4944	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4946	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C4947	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4948	VCEAGA1AW107M	R	100	10V	Electrolytic	AB
C4949	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4950	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4951	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4952	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4953	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4954	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C4955	VCEAGA0JW476M	R	47	6.3V	Electrolytic	AB
C4956	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C4957	VCEAGA1HW105M	R	1	50V	Electrolytic	AC
C4959	VCCCCY1HH560J	R	56p	50V	Ceramic	AA
C4960	VCCCCY1HH560J	R	56p	50V	Ceramic	AA
C4961	VCCCCY1HH560J	R	56p	50V	Ceramic	AA
C4963	VCCCCY1HH151J	R	150p	50V	Ceramic	AA
C4964	VCCCCY1HH151J	R	150p	50V	Ceramic	AA
C4965	VCCCCY1HH151J	R	150p	50V	Ceramic	AA
C4966	VCCCCY1HH101J	R	100p	50V	Ceramic	AA
C4967	VCCCCY1HH101J	R	100p	50V	Ceramic	AA
C4968	VCCCCY1HH101J	R	100p	50V	Ceramic	AA
C4969	VCKYCY1HB681K	R	680p	50V	Ceramic	AA
C4999	VCKYD41CY103N	R	0.01	16V	Ceramic	AA

RESISTORS

Ref. No.	Part No.	★			Description	Code
R4900	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R4901	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R4902	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R4904	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R4906	VRS-CY1JF153J	R	15k	1/16W	Metal Oxide	AA
R4907	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R4908	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R4909	VRS-CY1JF392J	R	3.9k	1/16W	Metal Oxide	AA
R4910	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R4911	VRS-CY1JF471J	R	470	1/16W	Metal Oxide	AA
R4912	VRS-CY1JF391J	R	390	1/16W	Metal Oxide	AA
R4913	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R4914	VRD-RM2HD220J	R	22	1/2W	Carbon	AA
R4917	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R4918	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R4919	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R4920	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R4921	VRS-CY1JF331J	R	330	1/16W	Metal Oxide	AA
R4922	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R4924	VRS-CY1JF272J	R	2.7k	1/16W	Metal Oxide	AA
R4925	VRS-CY1JF393J	R	39k	1/16W	Metal Oxide	AA
R4926	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R4927	VRS-CY1JF272J	R	2.7k	1/16W	Metal Oxide	AA
R4928	VRS-CY1JF393J	R	39k	1/16W	Metal Oxide	AA
R4929	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R4930	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R4931	VRD-RM2HD2R2J	R	2.2	1/2W	Carbon	AA
R4933	VRD-RA2BE153J	R	15k	1/8W	Carbon	AA
R4934	VRS-CY1JF563J	R	56k	1/16W	Metal Oxide	AA
R4935	VRD-RA2BE681J	R	680	1/8W	Carbon	AA
R4936	VRS-CY1JF563J	R	56k	1/16W	Metal Oxide	AA
R4937	VRS-CY1JF272J	R	2.7k	1/16W	Metal Oxide	AA
R4939	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R4940	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R4941	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R4942	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R4943	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R4945	VRS-CY1JF122J	R	1.2k	1/16W	Metal Oxide	AA
R4946	VRS-CY1JF122J	R	1.2k	1/16W	Metal Oxide	AA
R4947	VRS-CY1JF122J	R	1.2k	1/16W	Metal Oxide	AA
R4948	VRS-CY1JF183J	R	18k	1/16W	Metal Oxide	AA
R4949	VRS-CY1JF392J	R	3.9k	1/16W	Metal Oxide	AA
R4950	VRD-RA2BE182J	R	1.8k	1/8W	Carbon	AA
R4951	VRS-CY1JF392J	R	3.9k	1/16W	Metal Oxide	AA
R4953	VRS-CY1JF182J	R	1.8k	1/16W	Metal Oxide	AA
R4954	VRD-RA2BE331J	R	330	1/8W	Carbon	AA
R4955	VRS-CY1JF392J	R	3.9k	1/16W	Metal Oxide	AA
R4956	VRD-RA2BE472J	R	4.7k	1/8W	Carbon	AA
R4957	VRS-CY1JF331J	R	330	1/16W	Metal Oxide	AA
R4961	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R4962	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R4963	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R4964	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R4965	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R4966	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R4967	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R4968	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R4990	VRS-CY1JF100J	R	10	1/16W	Metal Oxide	AA
R4991	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R4992	VRS-CY1JF100J	R	10	1/16W	Metal Oxide	AA
R4993	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R4994	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R4995	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R4996	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R4997	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA
R4998	VRS-CY1JF102J	R	1k	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

P4900	QPLGN0275FJZZ	R	Plug	AF
SLD4901	PSLDM0207PEFW	R	Shield	AM
SLD4902	PSLDM0208PEFW	R	Shield	AH
TP4900	QLUGP0102PEZZ	R	Lug	AA
TP4901	QLUGP0102PEZZ	R	Lug	AA
TP4902	QLUGP0102PEZZ	R	Lug	AA

PWB-G DUNTK8558FMV4 TEXT UNIT

INTEGRATED CIRCUITS

Ref. No.	Part No.	★	Description	Code
IC1801	RH-iX2606CEZZ	R	LH64561D	BC
IC1802	RH-iX2451CEZZ	R	SAA5249P	BB

TRANSISTORS

Ref. No.	Part No.	★	Description	Code
Q1801	VS2SC1815GW-1	R	2SC1815GW	AB
Q1802	VS2SA1015Y/1E	R	2SA1015Y	AC
Q1803	VS2SC1815GW-1	R	2SC1815GW	AB
Q1804	VS2SC1815GW-1	R	2SC1815GW	AB
Q1805	VS2SC1815GW-1	R	2SC1815GW	AB

DIODES

Ref. No.	Part No.	★	Description	Code
D1801	VHD1SS119//1E	R	1SS119	AA
D1802	VHD1SS119//1E	R	1SS119	AA
D1803	RH-EX0619GEZZ	R	Zener Diode	AA
D1804	RH-EX0619GEZZ	R	Zener Diode	AA
D1805	VHD1SS119//1E	R	1SS119	AA

PACKAGED CIRCUIT

Ref. No.	Part No.	★	Description	Code
X1801	RCRSB0006PEZZ	R	Crystal	AK

COILS

Ref. No.	Part No.	★	Description		Code
L1801	VP-DF100K0000	R	Peaking	10µH	AB
L1802	VP-XF1R0K0000	R	Peaking	1µH	AB
L1803	VP-DF100K0000	R	Peaking	10µH	AB

CAPACITORS

Ref. No.	Part No.	★				Code
C1801	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1802	VCEAGA1AW107M	R	100	10V	Electrolytic	AB
C1803	VCEAGA1AW477M	R	470	10V	Electrolytic	AC
C1804	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1806	VCKYPA1HB102K	R	1000p	50V	Ceramic	AA
C1807	VCCCPA1HH150J	R	15p	50V	Ceramic	AA
C1808	VCCCPA1HH560J	R	56p	50V	Ceramic	AA
C1810	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1811	VCE9AA1HW105M	R	1	50V	Elect.(N.P)	AB
C1812	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1813	VCEAGA1AW107M	R	100	10V	Electrolytic	AB
C1814	VCEAGA1CW106M	R	10	16V	Electrolytic	AA
C1815	VCKYPA1HB221K	R	220p	50V	Ceramic	AA

RESISTORS

Ref. No.	Part No.	★				Code
R1801	VRD-RA2BE273J	R	27k	1/8W	Carbon	AA
R1802	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1803	VRD-RA2BE222J	R	2.2k	1/8W	Carbon	AA
R1804	VRD-RA2BE682J	R	6.8k	1/8W	Carbon	AA
R1805	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1806	VRD-RA2BE272J	R	2.7k	1/8W	Carbon	AA
R1807	VRD-RA2BE100J	R	10	1/8W	Carbon	AA
R1808	VRD-RA2BE821J	R	820	1/8W	Carbon	AA
R1809	VRD-RA2BE152J	R	1.5k	1/8W	Carbon	AA
R1810	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R1811	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R1812	VRD-RA2BE102J	R	1k	1/8W	Carbon	AA
R1813	VRD-RA2BE471J	R	470	1/8W	Carbon	AA
R1814	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1816	VRD-RA2BE472J	R	4.7k	1/8W	Carbon	AA
R1817	VRD-RA2BE100J	R	10	1/8W	Carbon	AA
R1818	VRD-RA2BE222J	R	2.2k	1/8W	Carbon	AA
R1819	VRD-RA2BE272J	R	2.7k	1/8W	Carbon	AA
R1820	VRD-RA2BE122J	R	1.2k	1/8W	Carbon	AA
R1822	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1823	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1824	VRD-RA2BE472J	R	4.7k	1/8W	Carbon	AA
R1825	VRD-RA2BE822J	R	8.2k	1/8W	Carbon	AA
R1826	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA

MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
P1801	QPLGN0885CEZZ	R	Plug	AC
P1802	QPLGN0785CEZZ	R	Plug	AC
SLD1801	PSLDM0174PEFW	R	Shield	AD
SLD1802	PSLDM0175PEFW	R	Shield	AD

PWB-H DUNTK9360WEV2 POWER 2 Unit

Ref. No.	Part No.	★	Description			Code
INTEGRATED CIRCUITS						
IC2701	RH-iX0249CEZZ	R	I.C.			AE
IC2702	RH-iX0249CEZZ	R	I.C.			AE
TRANSISTORS						
Q2700	VS2SC945AQ/-1	R	2SC945AQ			AB
DIODES						
D2700	RH-DX0279CEZZ	R	Diode			AB
D2701	RH-DX0279CEZZ	R	Diode			AB
D2702	RH-DX0229CEZZ	R	Diode			AF
D2703	VHDTF561SA/-1	R	TF561SA			AM
D2704	VHDTF561SA/-1	R	TF561SA			AM
D2705	RH-DX0336CEZZ	R	Diode			AH
CAPACITORS						
C2701	RC-FZ008SCEZZ	R	Capacitor			AE
C2702	RC-EZ0297CEZZ	R	Capacitor			AN
C2703	VCEA0A1CW476M	R	47	16V	Electrolytic	AB
C2704	VCEA0A2GW106M	R	10	400V	Electrolytic	AE
C2705	VCEA0A1HW106M	R	10	50V	Electrolytic	AB
C2706	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C2707	VCFYHA1HA334J	R	0.33	50V	M.Polypro	AC
RESISTORS						
R2700	VRD-RA2EE331J	R	330	1/4W	Carbon	AA
R2701	VRS-VV3DB822J	R	8.2k	2W	Metal Oxide	AA
R2702	VRD-RM2HD122J	R	1.2k	1/2W	Carbon	AA
R2703	VRS-VV3DB822J	R	8.2k	2W	Metal Oxide	AA
R2704	VRD-RA2EE102J	R	1k	1/4W	Carbon	AA
R2705	VRD-RA2EE331J	R	330	1/4W	Carbon	AA
R2706	VRD-RA2EE101J	R	100	1/4W	Carbon	AA
R2707	VRD-RA2EE102J	R	1k	1/4W	Carbon	AA
R2708	VRD-RM2HD333G	R	33k	1/2W	Carbon	AB
R2709	VRD-RM2HD392J	R	3.9k	1/2W	Carbon	AA
R2710	VRD-RA2EE471J	R	470	1/4W	Carbon	AA
R2711	VRD-RM2HD223G	R	22k	1/2W	Carbon	AB
R2712	VRD-RM2HD223G	R	22k	1/2W	Carbon	AB
R2713	VRD-RM2HD223G	R	22k	1/2W	Carbon	AB
R2714	VRD-RM2HD183G	R	18k	1/2W	Carbon	AB
R2715	VRW-KP41C4R7K	R	4.7	15W	Cement	AG
R2716	VRW-KP41C4R7K	R	4.7	15W	Cement	AG
R2717	VRS-VV3AB103J	R	10k	1W	Metal Oxide	AA
R2718	VRS-VV3AB103J	R	10k	1W	Metal Oxide	AA
R2719	VRS-VV3AB103J	R	10k	1W	Metal Oxide	AA
R2720	VRS-VV3AB103J	R	10k	1W	Metal Oxide	AA
R2721	VRS-VV3AB103J	R	10k	1W	Metal Oxide	AA
R2722	VRW-KP4ACR39K	R	0.39	10W	Cement	AF
R2723	VRW-KQ41C1R0K	R	1	15W	Cement	AF
MISCELLANEOUS PARTS						
P2700	QPLGN0369GEZZ	R	Plug			AB
P2701	QPLGN0269GEZZ	R	Plug			AB

MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
⚠	QACCB5003PEZZ	R	AC Cord (33RX20JB)	AY
⚠	QACCZ2008PEZZ	R	AC Cord (33RX20Jc)	AM
	RSP-Z0095CEZZ	R	Speaker	BG
	VSP0010PBS98A	R	Speaker	AV
	VSP9050PB12WA	R	Speaker	AP
	LHLDK0005PE00	R	AC Cord Holder	AC

SUPPLIED ACCESSORIES

Ref. No.	Part No.	★	Description	Code
ACCESSORIES				
	RRMCG1431CESA	R	Infrared R/C Unit	AU
	TINS-6243CEZZ	J	Operation Manual (33RX20JB)	
	TINS-6241CEZZ	J	Operation Manual (33RX20Jc)	
ACCESSORIES (NOT REPLACEMENT ITEM)				
	TCAUA3030CEZZ	-	Caution Card	–
	UBATU0001AJZZ	-	Dry Batteries	–

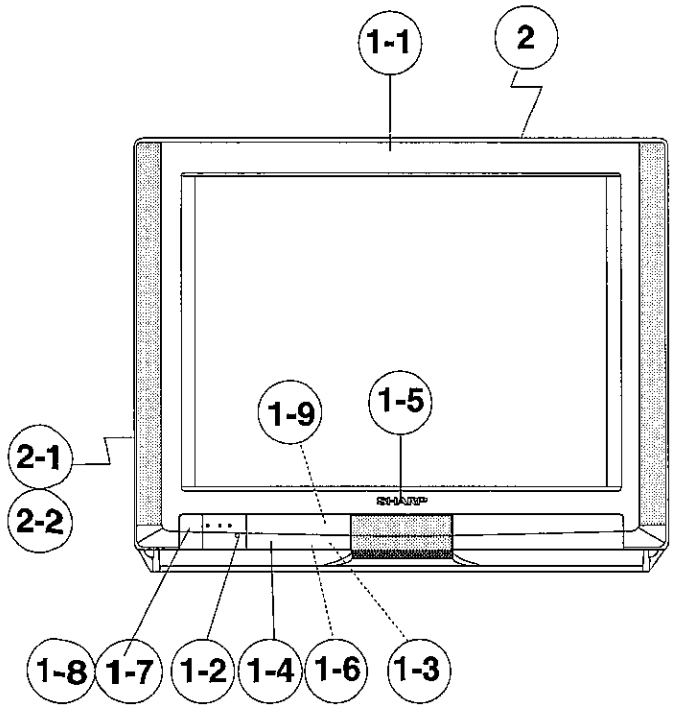
PACKING PARTS

Ref. No.	Part No.		Description	Code
	SPAKC5132CEZZ	-	Packing Case (33RX20JB)	—
	SPAKC5133CEZZ	-	Packing Case (33RX20Jc)	—
	SPAKX2793CEZZ	-	Buffer Material	—
	SPAKA0170CEZZ	-	Polyethylene Bag	—
	SSAKH0144CEZZ	-	Polyethylene Bag (33RX20Jc)	—
	SPAKP0575CEZZ	-	Wrapping Paper	—

Ref. No.	Part No.	★	Description	Code

CABINET PARTS

1	CCABA2291CE01	J	Front Cabinet Ass'y	BS
1-1	*Not Available*	-	Front Cabinet	—
1-2	HDECQ0695CESA	J	LED Cover	AE
1-3	GCOVA1730CEZZ	J	Cover, in Door	AF
1-4	GDORF2019CESA	J	Door	AE
1-5	HBDGB3120CESA	J	Badge, "SHARP"	AG
1-6	HiNDP5020CEZZ	J	Indication Plate, in Door	AD
1-7	JBTN-1968CESA	J	Power Button	AE
1-8	MSPRC0061CEFW	J	Spring, Power Button	AA
1-9	PKAi-1085CE00	J	Latch, for Door	AD
2	CCABB2214CE01	J	Rear Cabinet Ass'y	BT
2-1	*Not Available*	-	Rear Cabinet Ass'y	—
2-2	HiNDP4924CEZZ	J	AV Indication Plate	AE



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